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Our annual competition honoring IT initiatives that benefit society culminates this week with an awards ceremony in Washington. Inside, we profile five of the 47 finalists. Page 23

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Red Hat Adds Directory, but Users Stay Focused on OS

Vendor's efforts to go beyond Linux aren't an easy sell, IT execs say

BY CAROL SLIWA
NEW ORLEANS

Red Hat Inc. marked the occasion of its first user conference last week by officially launching its Directory Server, the latest addition to its open-source software arsenal.

ONLINE
Read a Q&A with Red Hat's Matthew Szulik

But Red Hat faces an uphill climb as it tries to build on the success of its market-leading Linux distribution with additional offerings that move higher up the software stack, according to some analysts. They said the strategy puts the Raleigh, N.C.-based company into competition with better-established vendors that, in many cases, are its hardware and software partners.

That point was backed up by several users attending the inaugural Red Hat Summit here. Although the users said they like having open-source alternatives to the commercial products they now use, they added that it's unlikely that their companies will swap out their directory infrastructures or

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IT Sees New, Denser Servers As a Better Fit

Saving on data center real estate a big factor in buying decisions

BY PATRICK THIBODEAU

Many users upgrade to new servers because they need performance gains or improved capabilities. But there's another reason that may become an increasingly important factor in server purchases: the desire to avoid new real estate costs by deploying higher-density servers.

For instance, IBM last week announced an x86-based system that can scale up to 32 Xeon processors and is also designed to support the dual-core version of the chip that Intel Corp. plans to release next year. Among the companies that are testing the xSeries 460 server is London-based St. Paul International

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Sun Stakes Rebound On StorageTek Gambit

Acquisition plan intrigues some users but leaves others with questions

BY LUCAS MEARIAN

Sun Microsystems Inc.'s agreement last week to buy Storage Technology Corp. for about $4.1 billion could be a good deal for both companies, some users and analysts said. But it left others scratching their heads and thinking that Sun could have put its cash to much better use.

There was general consensus, though, that each company had little choice but to make a significant move. Sun, in particular, had to do something to boost its storage business and its overall market position against rivals such as IBM and Hewlett-Packard Co., according to IT managers.

Scott Briand, a senior IT analyst at Nova Scotia Power Inc. in Halifax, called the planned StorageTek acquisition an "eye-opener" that may give some needed direction to Sun's storage efforts, which he said haven't been clear.

Several months ago, Nova Scotia Power purchased disk arrays from Hitachi Data Systems Corp. Previously, it was using Sun-branded storage products made by Hitachi, but Briand said Sun's rebranding "didn't seem to add a lot of value." He added that the purchase of StorageTek will prompt him to "look and see what [Sun is] doing and where

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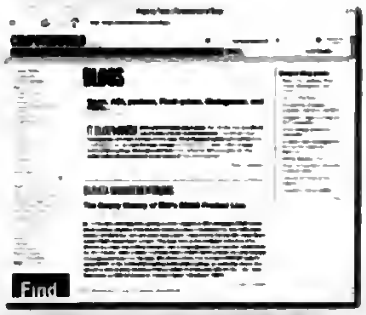

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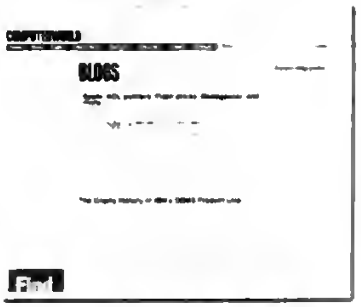

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AT DEADLINE

Red Hat Plans to Spin Off Fedora

Red Hat Inc. said it will create an independent foundation to oversee its Fedora open-source software initiative. Red Hat will still provide financial and engineering support for Fedora, but it hopes the Fedora Foundation will attract broader participation in projects. Mark Webbink, Red Hat's deputy general counsel, likened the move to IBM's spin-off of its Eclipse development framework last year.

EDS Faces Possible $166M Write-down

Electronic Data Systems Corp. may be forced to write down as much as $166 million in its second fiscal quarter due to problems with an undisclosed project. EDS said that by May 2, the end of its first quarter, it had invested that amount in the project. EDS blamed projections that the undertaking won't "achieve anticipated benefits."

Lawson Buys Swedish Vendor

The ERP market continues to consolidate with Lawson Software Inc.'s acquisition of Intentia International AB for $460 million in stock. The enterprise software company will operate under the Lawson name with U.S. headquarters in St. Paul, Minn., and international headquarters in Stockholm. The deal is expected to close by year's end.

Intel Discloses More About Yonah CPU

Intel Corp. has shed more light on its forthcoming dual-core mobile chip, confirming that the Yonah processor's two cores will share a single bank of cache memory. Yonah, the dual-core version of Intel's Pentium M processor, is slated to ship in the first quarter of 2006. Intel said Yonah has an integrated design that shares storage and power management resources within the chip.

HP Faces Scrutiny Over On-Demand Strategy

Vision for Adaptive Enterprise needs honing, users say

BY MATT HAMBLEN

HEWLETT-PACKARD Co. today plans to expand on its Adaptive Enterprise strategy for on-demand computing by announcing two OpenView software tools for managing service-oriented architectures (SOA) and reporting on internal controls for regulatory compliance purposes.

Analysts generally praised the new products, but they and some officials from the OpenView Forum International (OVFI) user group faulted HP for getting off to a slow start on the overall strategy, which the company announced two years ago. Some said HP has created a broad vision for Adaptive Enterprise without clearly defining its parts.

"I don't think HP's done a good job of explaining Adaptive Enterprise," said Steve Wostal, a former OpenView user who is now a consultant at Indianapolis-based Pepperweed Consulting LLC, which offers OpenView implementation services.

"There's a gap between implementation and theory," added Wostal, who is also a former OVFI board member. "While the theory is great, I don't think the applicatioo has been provided. I want to see their implementation strategy."

Push for More Progress

Wostal and others said they appreciate that Adaptive Enterprise follows the fundamentals of the IT Infrastructure Library, especially ITIL's guidance that IT systems be provisioned to be flexible for changing business needs.

But Thomas Reinsel, Pepperweed's president and CEO and president of the OVFI, said he would give HP only a "B" grade for progress on its Adaptive Enterprise vision.

"People still don't understand the concept or central idea," Reinsel said. "There's still a lot to understand [about] what it means to be adaptive, and we've got a long way to go."

Part of what's confusing is that an Adaptive Enterprise approach can encompass so many major IT concepts, such as change and configuration management and virtualization of servers or storage devices, he said.

Bill Emmett, chief solutions manager for HP's management software business, defended the company's progress in rolling out products to support Adaptive Enterprise.

"We've been pretty regimented with new technologies," he said.

For example, HP's OpenView Business Service Management suite, which was announced last year, provides a "very pragmatic approach for describing business processes," Emmett said.

Reinsel said HP appears to be heading in the right direction on Adaptive Enterprise with its two new OpeoView products, although he ooted that he hasn't been fully briefed on them.

The products, which are due to be announced at this week's HP Software Forum in Denver, include the OpenView SOA Manager and Compliance Manager. The latter tool is designed to provide reports on corporate compliance with laws such as the Sarbanes-Oxley Act.

SOA Manager is built around software that HP acquired when it bought Web services management tools vendor Talking Blocks Inc. in 2003. That product will become an "anchor point" between business users and IT, said Todd DeLaughter, vice president and general manager of HP's management software unit. "The tire-kicking around SOAs is now hitting the mainstream," he added.

54828

OpenView Group Embraces HP's User Event

THE OPENVIEW FORUM International's board last week voted unanimously to hold the group's 2006 conference as part of HP's new companywide user event instead of continuing to schedule it separately.

The OVFI's annual HP Software Forum is produced jointly with the vendor, and this year's event starts today in Denver. But next year's conference will take place within the HP Technology Forum, which HP is launching this September as a vehicle for consolidating its various user-group conferences.

"Our goal is to kind of put a conference within a conference and . . . still maintain our identity," said Thomas Reinsel, president of the eight-person OVFI board. "The stakes are high, and we are concerned about the blending of software into a larger event. Whether we lose our identity – we need to monitor that."

The OVFI agreed to join the HP-led conference because of concerns that the company might not send speakers or technologists to the HP Software Forum in the future, Reinsel said. "If HP heads west, we have to head west," he explained.

Reinsel added that the user group, which has about 7,000 members worldwide, wants to "aggressively work with HP on broadening the number of people that get exposed to HP software." He said the change will be officially announced Wednesday at the OVFI's conference, which is expected to attract about 2,000 OpenView users.

Mike Peckar, co-chairman of the OVFI's New England chapter, said he and some other chapter leaders dissented on the merger plan. "While it makes sense for HP to push its many user groups to consolidate under a single umbrella, I worry that those groups could eventually lose their voice," said Peckar, who heads Fognet Consulting in West Boylston, Mass.

The OVFI already plans to play a role at the first HP Technology Forum in New Orleans, as does the U.S. chapter of the Encompass user group, which has its roots among the customer base of the former Digital Equipment Corp. The OpenView group will help develop content for sessions, but many of the details have yet to be worked out.

For the combined 2006 show, the OVFI has reached an agreement with HP that will let it sell booth space to other vendors, which is a major source of the user group's funding, said Reinsel, who is also president and CEO of Pepperweed Consulting.

The OVFI was formed in 1993, and its first president was Richard Sturm, who is now an analyst at Enterprise Management Associates in Boulder, Colo. Sturm said a separate OpenView user event is no longer needed.

"I think the software event's main value is education, and that can be served at any event," Sturm said. And HP has influence over the existing OpenView conference anyway, he noted, adding that "it's not entirely independent."

– *Matt Hamblen*

Role Reversal: Audit Uncovers Gaps in SEC's IT Controls

Sarb-Ox enforcer has weaknesses in access controls

BY THOMAS HOFFMAN

The shoe is on the other foot at the U.S. Securities and Exchange Commission after an audit of the agency's 2004 financial statements revealed that the chief enforcer of the Sarbanes-Oxley Act had "numerous" information security control weaknesses of its own.

The audit, which was conducted last summer by the Government Accountability Office and published on May 26, found that the SEC "had not consistently implemented effective electronic access controls" around user accounts and passwords, access rights and permissions, and network security.

There's a touch of irony in the GAO's findings, since the SEC is charged with enforcing the Sarbanes-Oxley Act of 2002, which requires executives at publicly held companies to attest to their organizations' internal controls.

"There's some schadenfreude in discovering that the arbiters of what's right can't seem to get it right themselves," said Cathy Hotka, former vice president of IT at the National Retail Federation, who now runs an IT consulting practice in Washington.

Steps Taken

For its part, the SEC has already taken several steps to comply with the recommendations of the GAO audit — some initiated prior to the recommendations' release, said Corey Booth, a former McKinsey & Co. consultant who became the head of the agency's Office of Information Technology in early 2004.

Those steps to comply include strengthening the process of authorizing information systems accounts and passwords for SEC employees and discontinuing authorization for employees and contractors when they stop working for the agency. The SEC has also upgraded many of its intrusion-detection systems and firewalls, Booth said.

> During fiscal year 2004, numerous information security control weaknesses existed at SEC. Specifically, SEC had not consistently implemented effective electronic access control including user accounts and passwords, access right and permission network security, or audit and monitoring of security-related events to limit and detect access to its critical financial and [illegible] systems

In addition, the SEC has since added four information security specialists to its 130-person IT department and has created a more systematic process for vetting security issues in its IT development and deployment procedures, according to Booth.

The SEC expects to address all of the GAO's security recommendations by next June. The bulk of the work will be completed this year, said Booth. He declined to specify the amount to be spent on the work but did note that the agency was awarded a seven-figure increase in its information security budget for 2005.

Empathy for the SEC

Even though many auditors and corporate executives have grumbled about the time and costs required to comply with Sarbanes-Oxley, some said they are empathetic to the challenges that the SEC faces.

"I respect the SEC — they're in an incredibly difficult position," said Joseph Lacik Jr., CIO at Aviall Inc., a Dallas-based aviation aftermarket parts distributor.

Although Lacik said he doesn't expect the SEC to face much backlash from corporate officers for its information security control gaps, he did say that the agency should be held to the same standard as the companies it regulates. "They have to eat their own food like everyone else," he said.

Marios Damianides, international president of the Information Technology Governance Institute in Rolling Meadows, Ill., said the GAO findings aren't surprising, since "many corporations" have uncovered IT-related control issues in their Sarbanes-Oxley compliance efforts.

Said Damianides, "They're a government entity that, like any corporation, has to take care of its controls framework." **ID 54808**

McAfee Shifts Its Focus To Intrusion Prevention

BY JAIKUMAR VIJAYAN

On the eve of McAfee Inc.'s annual meeting with financial analysts last week, **Gene Hodges,** *president of the Santa Clara, Calif.-based company, spoke with* Computerworld *about McAfee's enterprise strategy and its plans to add new network access-control products next year.*

What kind of enterprise-oriented products can users expect to see from McAfee going forward? At the heart of our strategy has been a shift towards behavioral detection and intrusion prevention. Obviously, we're a company with a good pedigree in reacting to attacks with our antivirus software. But we saw several years ago that the threat profile and the speed of propagation would outstrip what most companies would be able to handle in terms of incident response times.

What about risk management products? You'll see the first real marriage of our risk management technology [which McAfee acquired when it bought Foundstone Inc. last August] with our intrusion-prevention technology early in 2006, with network access control products. We're going to call it the McAfee Policy Enforcer, and it will consist of a series of system software that does near-real-time vulnerability analysis on managed devices, plus network scanners from the Foundstone product line.

A lot has been made of Microsoft's plans in the IT security market. Is the Microsoft threat to pure-play vendors such as McAfee overstated? Microsoft will clearly be a significant competitor. But our belief is that they'll be most effective in the consumer arena. Luckily, our channel strategy is focusing on two areas where they have less muscle — in PC OEMs and in service providers. [But] Microsoft will present a bar that we have to clear in terms of added value. **ID 54830**

GAO Says FAA Needs a Stronger IT Architecture

THE FEDERAL AVIATION Administration must develop a strong enterprise architecture if it is to successfully modernize its air traffic control systems, according to a report released last week by the Government Accountability Office.

The GAO had been asked by members of Congress to determine whether the FAA has effective management processes for developing and implementing an enterprise architecture that would serve as a blueprint for the modernization effort.

The FAA's enterprise architecture program today includes two projects – one for its National Airspace System (NAS) operations and another for its administrative and mission-support activities.

The main problem with that effort, according to the report, is that the FAA hasn't yet established effective management capabilities for developing, maintaining and implementing an architecture.

A spokeswoman for the FAA said the agency is preparing a formal response to the GAO's report, which it will submit to the U.S. Department of Transportation.

The GAO said it's "critical" that the FAA establish an effective enterprise architecture management program that has the early support of senior managers at the agency.

In its response to the report, the Department of Transportation said it plans to do so by setting up a steering committee; developing a policy to govern the development, maintenance and implementation of the architecture program; and having an approved architecture project management plan for the non-NAS-related effort.

– Linda Rosencrance

BRIEFS

Nortel Ships Fix For VPN Bug

Nortel Networks Corp. is offering a fix for a vulnerability that could let an attacker crash a virtual private network router with a single malformed packet. The denial-of-service vulnerability was reported by Internet security testing company NTA Monitor Ltd. and affects several Nortel VPN routers. NTA called the vulnerability "serious." Nortel gave it "major priority" status.

Infosys, Alstom Plan R&D Center

Infosys Technologies Ltd. and Alstom SA are jointly opening a research and development center in Bangalore, India. Paris-based engineering company Alstom plans to spend about $30 million on research at the R&D center over three years while growing the staff to 300. Infosys staffers will run the center and provide the infrastructure.

HP Unveils Three Thin-Client Devices

Hewlett-Packard Co. has unveiled thin-client devices that can provide basic computing power for low-end users while letting IT maintain control over the systems. The three Compaq T5000 devices – priced from $230 to $310 – are cheaper than HP's low-end PCs. They will be available this month.

Tibco Issues Q1 Results Warning

Tibco Software Inc. warned that its revenue and earnings were lower than expected in its just-ended second quarter, marking the second quarter in a row the company has fallen short. Tibco said several large deals didn't close before the quarter ended on May 27, and it now expects revenue for the period to be $100 million to $102 million versus its $108 million projection.

ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

New Infrastructure Lurks Behind . . .

. . . the rush to service-oriented architectures (SOA). And it won't be just more software. A new layer of hardware ultimately awaits IT managers who deploy Web services, which depend on XML messaging. "We need a network that knows how to handle messages, not just packets," insists Eugene Kuznetsov, chairman and chief technology officer of DataPower Technology Inc. in Cambridge, Mass. Next quarter, DataPower will ship its yet-to-be-priced XML Concentrator chassis, which is laden with blade computers that use specialized message processors to accelerate XML performance and apply security and quality-of-service policies. Kuznetsov acknowledges the expense and headaches of adding another hardware layer inside most corporate networks, which is why DataPower is targeting Internet service providers with XML Concentrator. Service providers will be able to charge you a pretty penny for processing XML messages — pennies you'll be glad to part with just to avoid managing more IT gear.

Wayne Ariola, vice president of corporate development at Parasoft Corp. in Monrovia, Calif., agrees that specialized hardware for message handling is inevitable. He says a full-blown SOA infrastructure is coming because of the technology's success. "The early adopters are gone, and we're off to the races," Ariola says. He claims that many companies in the race have wound up on Parasoft's doorstep because of its SOAPtest development tools. Version 4.0 ships this week, adding improved security- and penetration-testing tools. For example, you can check if your application's code is susceptible to XML bombs (messages that continually call themselves until a system's RAM is overloaded) or determine if your SOA approach complies with Web services standards. SOAPtest 4.0 starts at $3,995.

Migrate Visual Basic apps to Linux . . .

. . . and Macintosh clients with the touch of a button. REALbasic 2005 imports VB code and compiles versions of the program for Linux and Macintosh users. The integrated development environment from Austin-based Real Software Inc. next week ships in its final form for Windows and Mac systems and goes into beta for Linux. The Linux version will be ready for release by month's end. According to CEO Geoff Perlman, VB users who need to deploy their work on non-Windows systems no longer have to worry about virtual machines or managing Dynamic Link Libraries, because REALbasic handles those details and more. The new release adds about 100 features, such as a tabbed browser and the open-source SGLite database, and costs $395 for the Professional Edition. Perlman suggests that REALbasic also will appeal to VB coders who are unhappy with Microsoft Corp.'s forced march toward Visual Basic .Net. "VB .Net is radically different than VB 6 for most users," he says.

Hercules ships as software or as . . .

. . . part of an integrated appliance. Citadel Security Software Inc. in Dallas this week releases an appliance version of its Hercules 4.0 vulnerability management tool as an alternative to licensing the software by itself. Hercules gathers asset data from a dozen or so network-scanning products, finds system vulnerabilities and then remediates those security lapses. Carl Banzhof, chief technology officer at Citadel, says IT focuses too much on patching software defects, which reflect only 20% to 30% of all vulnerabilities. Unsecured accounts, unnecessary services, back doors and misconfigurations of systems account for the majority of the problems, Banzhof says. In addition, Hercules 4.0 adds risk analysis reporting so users can prioritize fixing vulnerable devices. Software licenses for Hercules 4.0 start at $28 per device. The HS1500 appliance, with the software, carries a $1,000 monthly subscription fee plus per-usage charges.

Now that the 'O' word no longer . . .

. . . needs to be whispered by users weighing possible outsourcing moves [QuickLink 54064], Artifact Inc. CEO Mark Wesker contends that IT executives should start thinking like their peers in manufacturing. Software development is largely specialized and repeatable and thus could be automated, he argues. An application development supply chain "is emerging underneath our feet right now," he says, so much of the work should be outsourced to the best supplier for a given task — either onshore or off. All IT needs is "visibility and control" throughout the app-dev process, he claims. Baltimore-based Artifact offers an online service that gives IT managers dashboard views of the state of an application's development. Pricing starts at $500 per project. **QL 54778**

Citadel's vulnerability management appliance

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HP Users Say NonStop Servers Will Need Long-Term Support

Current models are still expected to be in use beyond planned 2013 cutoff date

BY PATRICK THIBODEAU

HEWLETT-PACKARD Co. last week said it will continue to support its existing MIPS-based NonStop servers through 2013, despite a plan to begin shipping Itanium-based models next month. But some users of the fault-tolerant systems think HP may have to extend the support even beyond that far-off date.

In an era when commodity servers are routinely replaced within three to five years, users and consultants say that NonStop systems running mission-critical transaction-processing workloads typically stay in production for seven to 10 years. And there are stories of machines remaining in operation for 15 or more years.

HP will sell the NonStop hardware, which is based on processors from Silicon Graphics Inc., until the end of 2008. Users who continue to buy those systems over the next several years may need support longer than HP now plans, said Neil Clark, a systems consultant manager at Gallagher Bassett Services Inc., a risk and claims management company in Itasca, Ill.

"Offering support for only five years after selling a system doesn't seem long enough," Clark said.

His point was backed up by Cathy Meurer, the Tandem technical services manager at U.S. Foodservice Inc.'s national processing center in Phoenix. Meurer said she expects that many users will run MIPS-based NonStop systems beyond 2013 and that HP will continue to support them.

"Tandem" refers to Tandem Computers Inc., the company that developed the NonStop line prior to being bought by Compaq Computer Corp., which HP later acquired.

Meurer, who heads a regional group of Tandem and NonStop users within the ITUG user organization, said there have never been any questions raised about HP's ongoing support of the systems. "New products and features — maybe," she said. "High maintenance costs — probably. But maintenance nonetheless."

Some companies, especially ones that are running high transaction volumes, such as Chicago Mercantile Exchange Holdings Inc. and Bank-Verlag GmbH in Cologne, Germany, plan to quickly begin adopting the new Integrity NonStop line because of the performance improvements expected from Intel Corp.'s Itanium 2 chip. HP formally announced the Integrity models last week [QuickLink 54647] and said they can run up to 2.5 times faster than existing models.

But many other users will likely wait for later releases before switching to the Integrity line, said Mike Kilpatrick, a NonStop consultant in Taylor, Texas. "Unless that box has been out in the field for any time, it's hard to say how reliable it will be," he noted.

HP officials said they expect the old and new systems will be run side by side in many cases. "A lot of customers will have coexistence for a long time," said Randy Meyer, HP's director of enterprise storage and servers.

One user that already has migrated applications off an older NonStop to an Itanium-based system is Bank-Verlag, which processes records and ensures regulatory compliance for some 300 banks. Wolfgang Breidbach, technical director of NonStop systems, said the migration took one IT worker only a couple of days. 54826

Integrity NonStop

- Supports up to 4,080 Itanium 2 processors.
- Is rated for 99.99999% hardware availability.
- Can run 20 years on average without scheduled downtime, HP says.
- Is compatible with HP's existing NonStop S-series models.
- Pricing starts at about $400,000 but is highly dependent on user configurations.

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QuickLink 52200
www.computerworld.com

3Com, HP Expand Switch Offerings

BY MATT HAMBLEN

3Com Corp. and Hewlett-Packard Co.'s ProCurve networking unit will separately announce new switches and software products today, expanding their support for building security and management tools into corporate networks.

3Com is introducing a family of 12 stackable switches, primarily for use at the edge of networks. It's also adding two switches with modular chassis to its Switch 7700 family, plus software designed to support endpoint security and configuration of networks that include equipment from 3Com and other vendors.

HP will roll out a switch that supports multilayer routing at the core of a network, as well as no-cost software enhancements intended to improve the security and mobility of devices connected to its ProCurve 5300xl series of network edge switches. HP also plans to announce upgraded network management and wireless access point software.

Mark Berkheimer, a potential customer for 3Com's new stackable Switch 5500G devices, said they could be used to create a core switching network "with all the bells and whistles, without the outlay [for] a large chassis."

Berkheimer is an IT manager at the Susquehanna Area Regional Airport Authority, which operates Harrisburg International Airport and two other airports in Pennsylvania.

A Cure for Most Needs

The 5500G is another enterprise-class offering resulting from 3Com's joint venture with China-based Huawei Technologies Co. Berkheimer noted that he could stack up to eight 5500Gs, with a total of as many as 384 ports, to act as one switch. "That will cure most user needs," he said.

Analysts said that the new security and management products and upgrades are part of an ongoing trend by switch makers to incorporate such tools for networking. "It's become [basic] to have some kind of security in switching," said Steve Schuchart, an analyst at Current Analysis Inc. in Sterling, Va.

HP's new ProCurve Routing Switch 9400sl series supports IPv6 and offers up to 32 ports for 10Gbit/sec. routing of data, said Al Madden, the company's Americas product manager for ProCurve.

Schuchart said users of the 9400sl series need to follow how the product evolves because it's based on the BigIron MG8 switch built by Foundry Networks Inc. Foundry isn't expected to provide further upgrades for the switch, he added. However, HP said there will be support and upgrades for the 9400sl series.

In addition, HP plans to roll out new switching technology in the fall that will involve a core network device with less intelligence built in and more distributed to devices at the network edges, Schuchart said. The new concept is based on technology that HP acquired from Riverstone Networks Inc. last June.

Madden wouldn't say whether the 9400sl was developed by Foundry. 54829

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collaboration

BRIEFS

Oracle Revises Solaris 10 Licensing

Oracle Corp. has changed licensing terms for users that run its database on Sun Microsystems Inc.'s Solaris 10 operating system, revising a model that analysts said put Sun at a competitive disadvantage with Hewlett-Packard Co. and IBM. The changes lower licensing costs for Solaris users running Oracle software on only part of their servers, a practice called partitioning.

Nortel Reports Loss On Slight Sales Rise

Nortel Networks Corp., recovering from an accounting scandal and an industry downturn, reported a first-quarter loss on sales that rose slightly from last year.

	$2.54B	($49M)
	$2.44B	$59M

Quest Buys Vintela For $56.5M in Cash

Irvine, Calif.-based Quest Software Inc. has agreed to acquire privately held Vintela Inc. for approximately $56.5 million in cash. Lindon, Utah-based Vintela makes tools that allow Microsoft Corp.'s Active Directory and Systems Management Server to manage computing environments that include both Windows and non-Windows platforms. The deal is expected to close this summer.

Fed Agencies Eye RFID Technology

Some U.S. government agencies are eyeing radio frequency identification technology as a tactic to save money and improve services. In a report, the Government Accountability Office said it found that 13 of 24 federal agencies are implementing or exploring RFID initiatives for a number of uses, including logistics support, shipment tracking and border patrol.

Tablus, PortAuthority Unveil Security Tools

Updates aim to boost protection against data thefts

BY JAIKUMAR VIJAYAN

TWO NEW content-monitoring tools to be released this week will add to the growing number of options for security managers looking to protect sensitive data against compromises and theft.

Tablus Inc. in San Mateo, Calif., and PortAuthority Technologies Inc. (formerly Vidius Inc.) will both release updated versions of their respective technologies this week.

Tablus' upgraded hardware and software platform features a component called Content Alarm NW 2.0 for monitoring and blocking information leaks via the network and a component called Content Alarm DT 2.0 that's designed to do the same at the desktop level. The company touts it as the first content monitoring product designed to prevent data leaks at both the network level and at the desktop.

The product uses Google-like crawler technology to identify and "fingerprint" sensitive data such as financial or personal information. On a network, the Tablus tool monitors traffic to ensure that the fingerprinted data is not illegally transmitted out of the network via e-mail, instant messaging, FTP or any other means, said CEO Jim Pante.

A similar approach is being applied on the desktop side to ensure that users can't illegally modify, copy, delete or save protected data on thumb drives, external hard disk or private e-mail spaces, be said.

Such capabilities are crucial for protecting sensitive data, said Dmitriy Kalika, IT director at Amide Pharmaceutical Inc., a manufacturer of generic drugs in Little Falls, N.J. Amide's networks hold drug formulation information that is relatively easy to print out or download and spirit away in devices such as USB thumb drives and external storage devices, Kalika said.

"With Tablus, I can control what happens to the files," he said. "It does not allow anybody to do anything unless they have permission."

Data Recognition Corp., a Maple Grove, Minn.-based provider of educational testing and assessment programs, is using Tablus' network monitoring technology to protect test booklets, answer keys, scores and similar information, said Michelle Edenborg, the company's IT director.

All information that is transmitted out of the company's network is inspected for sensitive data by Tablus' appliance, she said.

Meanwhile, Beverly Hills, Calif.-based PortAuthority is enhancing its content monitoring product, PortAuthority for Internal Mail, with a function for scanning internal e-mails for signs of data misuse. The product, which already allows companies to monitor external e-mails, adds support for Microsoft Exchange 2003 internal e-mail and for ISA 2004 Web proxy servers.

"There is definitely growing interest" in tools such as these, said Dan Keldsen, an analyst at Delphi Group, a Perot Systems Corp. company in Boston. Compliance issues and fears of data loss are driving much of it, he said.

Also, network security vendors traditionally haven't paid a lot of attention to content protection and issues such as inappropriate use of information by insiders, which vendors of content monitoring tools are beginning to address, Keldsen said. **54822**

CONTENT MONITORING OFFERINGS

- **Tablus Content Alarm NW 2.0 and Content Alarm DT 2.0:** Real-time network traffic analysis, linguistic analysis of both structured and unstructured data, and Google-like crawler technology for creating digital fingerprints of data. Designed to protect sensitive data on both network and desktop levels. Pricing starts at $25,000 for the departmental edition; the enterprise edition starts at $75,000.
- **PortAuthority for Internal Mail:** Designed to prevent leaks of confidential information between internal e-mail users. Supports Microsoft Exchange 2003, Lotus Domino and Exchange 2000.

Informix Users Want More From IBM

BY MARC L. SONGINI

IBM is trying to reassure customers who fear that the perception that the Informix database is a dead product will continue to grow and eventually become reality.

IBM bought the Informix technology in 2001 to boost its presence in the distributed database market and better compete against rivals Oracle Corp. and Microsoft Corp.

While seven Informix customers interviewed late last month at the International Informix User Group (IIUG) conference and elsewhere said IBM is responsive to their development needs, some fear a continued lack of visibility will lead to more independent software vendor defections and stronger efforts by IBM's sales force to convince users to replace Informix with DB2.

Ironically, some DB2 users recently criticized IBM for neglecting their product [QuickLink 54664].

The concerns come as Gartner Inc. released a report showing a decline in Informix sales during 2004 and noting that key IBM partners such as Computer Associates International Inc. have said that they won't support future versions of Informix.

Prevailing Perception

"The world has a perception that Informix is dead," said Stuart Litel, president of the IIUG and chief technology officer at Informix reseller Kazer Corp. in Lee's Summit, Mo. He blamed that partly on IBM's postacquisition plan to create a "merged product."

Several users criticized IBM's database sales force as overly DB2-centric. "It's almost like they are satisfied in supporting the Informix product line for the current user base but do not want to risk possible sales of the Informix line affecting their DB2 revenue," said Clifton Bean, a database consultant at a company that he asked not to be named.

One database administrator from a hospitality company, who also asked not to be named, runs the flagship Informix Dynamic Server Version 9.4. He said there have been some attempts by salespeople to introduce DB2 into his shop.

Kevyn Schneider, a business intelligence architect and IIUG member, said that after the postacquisition departure of most of the Informix sales force, "I think many in the Informix community feel we are the stepchildren."

Bruce Weed, program director at Informix, said IBM is holding road shows and online events to let customers and developers interact. This year, the company will start to focus on grass-roots marketing among partners to make them "aware of the viability of Informix," he said. **54809**

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GLOBAL An International IT News Digest

Israeli Police Uncover Trojan Horse Spy Ring

ISRAELI POLICE have uncovered a major industrial spy ring that allegedly used Trojan horse software to snoop into some of the country's leading companies.

A husband-and-wife team, Michael Haephrati and Ruth Brier-Haephrati, was detained last week in London on suspicion of creating the Trojan horse program. The software was sent via e-mail or computer disks to people at targeted companies and was then used by competitors to harvest confidential information from the infected PCs, according to a report in the *Haaretz* newspaper.

The Tel Aviv-based newspaper detailed how a wide range of businesses, including television, mobile phone, automotive and utility companies, allegedly used the Trojan horse to obtain "tens of thousands" of pilfered documents.

Police told *Haaretz* that the companies started using the malicious software after engaging the services of any one of three private investigation agencies, which were given the task of carrying out the industrial espionage. The newspaper reported that another 21 people have been detained for questioning in Israel.

■ TECHWORLD.COM (U.K.) AND IDG NEWS SERVICE

GLOBAL FACT

Maximum jail sentence for phishing proposed in a U.K. antifraud bill

U.K. Biometric Test Finds Scanning Glitches

LONDON

THE U.K. GOVERNMENT has reintroduced a bill to create a biometric identity card system by 2010 to help fight terrorism and fraud, after having shelved the measure before last month's general election [QuickLink 53211]. But it also released a report describing what officials called "teething problems" with the technology.

The report on the U.K. Passport Service's eight-month trial of biometric technology, which involved 10,000 people, cited problems with scanning large fingers and the eyes of people with dark complexions, for example.

Of the three methods tested, facial scanning had the lowest verification success rate, especially in bad lighting, the study found. Fingerprint scanning had a better success rate, but the report said the scanner surface was "too small to scan a sufficient area of fingerprint from participants with large fingers." Eye scanning was the most accurate, but the machines had difficulty scanning the irises of people with dark complexions and people over the age of 50, according to the report.

■ LAURA ROHDE, IDG NEWS SERVICE

Japan Aims for PFLOPS In Supercomputer Race

TOKYO

JAPAN THIS MONTH will begin a research effort to build a supercomputer capable of crunching numbers about 30 times faster than today's fastest system can, the country's government said last week.

Japan's Ministry of Education, Culture, Sports, Science and Technology has established a program with NEC Corp., Hitachi Ltd. and several Japanese universities to develop by 2011 a supercomputer that can perform more than 3 quadrillion floating-point operations per second, or 3 PFLOPS. "We predict that [IBM's] Blue Gene/L or its successors will be working at about 3 or 4 PFLOPS around 2010. Our target is to be at least the same speed or faster," a ministry official said. **54777**

■ PAUL KALLENDER, IDG NEWS SERVICE

Compiled by Mitch Betts.

Briefly Noted

Transmeta Corp. in Santa Clara, Calif., said last week that it has agreed to sell its Crusoe line of microprocessors to Culturecom Technology Ltd. in Hong Kong for $15 million in cash. Transmeta announced in late March that it would exit the chip-making business after failing to break into the market for notebook PCs [QuickLink 53539].

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Deutsche Telekom AG, Europe's largest telecommunications service provider, last month named 46-year-old Peter Thomas Sany CIO, effective Sept. 1, and said he will be in charge of information management and processes. The Bonn-based company also named its first chief technology officer, Anton Hendrik Schaaf, 51, who will be responsible for technology and innovation activities starting June 16.

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Degussa AG, a large specialty chemicals company in Düsseldorf, Germany, has selected AT&T Corp. as its worldwide data network provider under a five-year contract valued at $45 million, AT&T announced last month.

New Tools Aim to Extend Business Intelligence

BY HEATHER HAVENSTEIN

Business intelligence is continuing its march toward the masses as new tools emerge to provide front-line enterprise workers with access to operational data, easing daily decision-making processes.

San Jose-based Business Objects SA this week is planning to unveil a set of tools that will let users of its BusinessObjects XI platform embed analytics capabilities in business processes.

Meanwhile, the Ottawa-based Eclipse Foundation this week will announce the first version of an open-source tool for building operational BI into Java applications.

The Business Objects tool set, called BusinessObjects XI Built for Operational BI, includes process tracker and analyzer tools that allow users to connect to operational data sources like Web services, Microsoft's .Net, data objects and data streams, executives said. Pricing for both tools starts at $10,000.

Oscar Vasquez, director of enterprise architecture at medical transportation company AMR Inc. in Denver, said the new Business Objects tools could help him align ambulance dispatchers, drivers and paramedics by providing analytics capabilities in those workers' processes.

"We've got workers on the supply side and the demand side, [and] they don't often see eye to eye because they are not looking at the same information," Vasquez said. "If our front-end dispatchers understand we are jeopardizing a service-level agreement, they will dispatch things differently or more quickly."

AMR plans to roll out the XI software in September.

Jonathan Rothman, director of data management at Emergency Medical Associates (EMA) in Livingston, N.J., said the new tools could provide templates to make it easier to embed BI analytics in processes. EMA, which is running XI in test mode in parallel with an older version of the Business Objects platform, has already launched operational BI to infuse the dashboards in hospital emergency rooms with information to feed metrics on admission and discharge times and other treatment-related thresholds, Rothman said.

The new tools could make it easier to extend operational BI capabilities by embedding analytics in processes for finance, accounts payable and billing users, he added.

Eclipse Unveils BIRT

For its part, Eclipse announced that Version 1.0 of its Business Intelligence and Reporting Tools (BIRT) project is now generally available.

BIRT, whose beta-test version has been downloaded 9,000 times since February, according to Eclipse executives, is designed to allow Java developers to easily integrate operational BI and reporting capabilities with Java applications.

Actuate Corp. is launching Actuate BIRT this week to provide fee-based support, maintenance and indemnification services for BIRT. The services are priced from $3,500.

Stavros Kounis, a developer and co-founder of Osmosis Network and Consulting in northern Greece, said his company is using BIRT to build reports for its Eclipse-based desktop applications, mainly because it allows the reports to be distributed over the Internet.

However, he added that BIRT is not as mature as some other commercial BI design products he has worked with in the past and that it has some bugs related to the way the designer tool handles database connections. **54819**

GLOBAL

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Jonathan Rothman, director of data management at Emergency Medical Associates (EMA) in Livingston, N.J., said the new tools could provide templates to make it easier to embed BI analytics in processes. EMA, which is running XI in test mode in parallel with an older version of the Business Objects platform, has already launched operational BI to infuse the dashboards in hospital emergency rooms with information to feed metrics on admission and discharge times and other treatment-related thresholds, Rothman said.

The new tools could make it easier to extend operational BI capabilities by embedding analytics in processes for finance, accounts payable and billing users, he added.

Eclipse Unveils BIRT

For its part, Eclipse announced that Version 1.0 of its Business Intelligence and Reporting Tools (BIRT) project is now generally available.

BIRT, whose beta-test version has been downloaded 9,000 times since February, according to Eclipse executives, is designed to allow Java developers to easily integrate operational BI and reporting capabilities with Java applications.

Actuate Corp. is launching Actuate BIRT this week to provide fee-based support, maintenance and indemnification services for BIRT. The services are priced from $3,500.

Stavros Kounis, a developer and co-founder of Osmosis Network and Consulting in northern Greece, said his company is using BIRT to build reports for its Eclipse-based desktop applications, mainly because it allows the reports to be distributed over the Internet.

However, he added that BIRT is not as mature as some other commercial BI design products he has worked with in the past and that it has some bugs related to the way the designer tool handles database connections. ⓒ 54818

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Continued from page 1

Sun

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HOW SUN AND STORAGETEK MATCH UP

Sun Microsystems Inc.	Storage Technology Corp.
PRIMARY PRODUCTS: Unix-based servers, workstation computers, storage subsystems	PRIMARY PRODUCTS: Automated tape storage systems and disk storage subsystems
EMPLOYEES: 35,000	EMPLOYEES: 7,100
2004 REVENUE: $11.18 billion	2004 REVENUE: $2.22 billion
LAST YEAR'S SALES: -2.2% compared with the previous year's	LAST YEAR'S SALES: +1.9% compared with the previous year's
2004 NET LOSS: $386 million	2004 NET INCOME: $191 million

The university is a heavy user of Sun's UltraSpare systems but buys its RAID storage devices from U.K.-based Xyratex Ltd.

Joel White, lead IT architect at Allstate Insurance Co. in Northbrook, Ill., said he has a number of questions for Sun executives, not the least of which is how the company will deal with overlapping products after it completes the StorageTek acquisition.

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But John McArthur, an analyst at IDC in Framingham, Mass., said he's "very positive" about the acquisition, despite Sun's previous difficulties in integrating other storage vendors that it has acquired. Sun has shelled out more than $1 billion to purchase companies such as Encore Computer Corp., MaxStrat Corp. and Red Cape Software. McArthur blamed its integration problems on the fact that those firms lacked significant installed bases.

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Analysts have said that you've had some major merger failures over the past few years and that your executives don't take advice from outsiders. How do you respond to that? There's got to be a balance. I spend a lot of my time out there talking to the analyst community and listening to the analyst community. I take their advice, and then you have to blend their input with the other variables to do what we think is in the best interest of executing an overall Sun strategy.

Will you keep these two companies separate? Are you going to try to integrate them right away? What's your road map? It's too early to really be able to talk about it. Over the next few months, we're going to start to ferret this thing out.

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Nonetheless, the deal caught HP off guard. "I haven't found anybody inside HP who wasn't surprised. I think everybody expected Sun to go more in the software direction. The tape market is . . . declining right now," said Eitenbichler.

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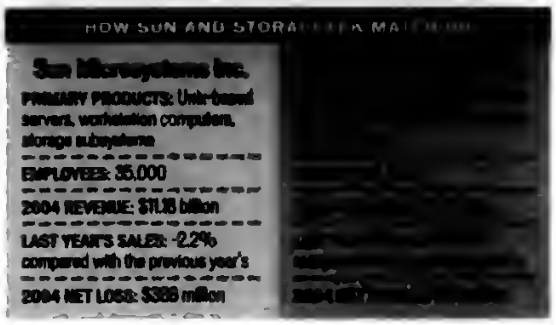

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Taking Ownershi

When Calderon Textiles'
distributors and
disaster recovery
logical and physical
that prioritized the risks, issues and resolutions. With this
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DON TENNANT

Believing in Blogs

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That's a pretty safe bet, and it speaks volumes about why it's so unfortunate that corporate IT leaders appear to be so skittish about blogging. CIO blogs would command the attention of vendors across the IT board that would be eager to find out what their customers and prospective customers are saying about them and their competitors. Your expectations, demands, grievances and successes would be analyzed up one side and down the other — the subject of vendor staff meetings and strategy sessions, with you in the virtual director's chair.

Now don't get me wrong — my focus on the user side of the equation isn't intended to diminish for a heartbeat how impressive it is that several large IT vendors are encouraging their employees to blog. There appears to be a genuine interest on the part of vendors like Sun, Microsoft and IBM to establish a dialogue between their employees and their customers, and to do it with minimal restrictions.

It takes courage to do what these vendors are doing, because clearly there's a risk that bloggers will convey information that sheds a negative light on the company or create confusion in the market. A prime example of the latter occurred last August when Sun President Jonathan Schwartz, a loose cannon if ever there was one, made a statement in his blog that was widely interpreted as an indication that Sun was considering a plan to acquire Novell.

And then there's the concern about bloggers airing dirty laundry. After all, that's a standard *raison d'etre* of blogs. I can cite an example of that as well — one that hit mighty close to home.

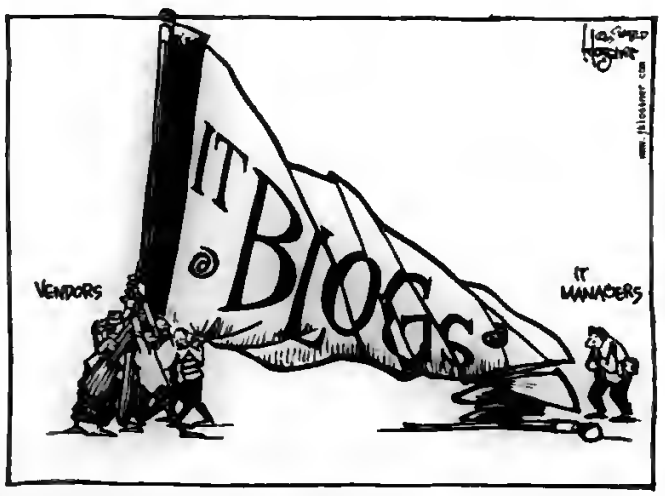
In October 2003, I read in Screenshots, a blog site in Malaysia run by a guy named Jeff Ooi, an apology by the editor of the Hong Kong edition of *Computerworld* for having plagiarized another writer. The admission and apology came only after Ooi had exposed the plagiarism in his blog. You have no idea how much I hated reading that.

I worked at *Computerworld Hong Kong* from 1990 to 2000 and served as the editor for more than eight of those years. During that time, a lot of very talented, dedicated people worked tirelessly to build that publication into what was unquestionably the premier IT newspaper in Asia. And in the blink of an eye, this idiot trasbed everything we had done. I said as much in a blog entry I submitted to Ooi's site. I also commended him for exposing it and encouraged him to keep the beat on. As much as I hated what had happened, I became a big fan of blogs that day.

That's why I'm especially gratified by the launch last week of a new blog area on our Web site [QuickLink a5920]. I'll be joining other *Computerworld* editors and guest bloggers in an aggressive effort to expand our delivery of compelling content to you and your peers.

Here's hoping the blogging momentum will build. And that your company will help build it. **54781**

Don Tennant



BRUCE A. STEWART

The Case for The Portfolio Business Case

ARE YOU FINDING it more difficult lately to construct a good business case? Infrastructure managers are probably screaming, "Lately? For years!" But now it's becoming more difficult for development teams, too.

Part of this was caused by the "big package" revolution of the last decade. Getting every department that uses an ERP package, for instance, to contribute its portion of the upgrade costs is a hassle for most IT managers, especially when they hear, "We didn't ask for this, so we're not paying for it."

Now, other factors are starting to appear. Service-oriented architectures are a brilliant idea for advancing enterprise flexibility and speed to market. But they are a nightmare when it comes to tracing a stream of benefits in a department and tying them to the costs of common code.

It's time to rethink the business case, because the application as we've known it is dying and being replaced by a mix of infrastructure and middle layers with a little application code on top. Rather than a monolith that can be justified — and upgraded — as a unit, we have many moving parts, all on their own upgrade cycles.

Better CIOs have seized upon portfolio management to help them deal with reinvestment questions. The best among them have moved even beyond that to looking at the portfolio and the business value it supports as a whole and then making investment decisions to manage the top line (by increasing value generated) and bottom line (by decreasing the cost to deliver that value).

Rather than have each project justify itself, savvy CIOs ensure that the complete portfolio — investment and re-

investment — maintains a desired rate of return.

Coupled closely with this notion is the idea that qualitative business value — the gains you expect to be there but can't cleanly quantify — counts. Customer gains yield a revenue impact, hence a top-line gain in value for the portfolio, regardless of the cause. Likewise, it's the overall profile of the infrastructure supporting the business that matters, not whether one part of it is experiencing a temporary cost bubble due to upgrades.

If this sounds to you as though the CIO is running IT just as the business is run, you're right. Organizations must invest in themselves just to hold their market positions. They must develop new products and take the risk that the investment won't pay off. They must periodically replace worn plants and equipment, refurbish customer points of presence and match competitive customer-service initiatives. This holistic view is precisely what modern IT systems demand.

Some of the problems the portfolio approach solves include:

- How do we justify changes we're making to support our enterprise architecture?
- Where's the business value in reducing complexity, especially when it'll take years?
- How do we replace the old version of that core package when the clients don't want to pay for it?
- How do we justify infrastructure upgrades when there aren't enough new applications coming onstream to pay for them?

When you can say to a recalcitrant business peer, "We're doing this because it increases my ROI by 25%, and I'm not telling the CEO I'm leaving that money on the table," that's CIO power.

It's also a good way to demonstrate you're ready to run a business, not just IT. **54702**

THORNTON A. MAY

Companies Striking Out On Strategy

THE PROCESS for making and executing strategy in most organizations is broken. Conversations with business school faculty colleagues conducting research on companies based in Canada, Mexico and the U.S. indicate that 70% to 90% of enterprises fail to successfully execute their strategies. The decisions facing executives today truly do matter and will set the course for the next decade. Existing strategy-making and strategy-executing processes appear woefully unsuited to meet the challenge.

The IT Leadership Academy, drawing on research and executive interviews conducted at the CIO Executive Summits in New York and Southern California and at the CIO Boot Camp in Las Vegas, created a strategy diagnostic that parsed the world into four categories of organization:

1. **Right strategy, right execution: 20%**
2. **Right strategy, wrong execution (in part): 19%**
3. **Wrong strategy, right execution: 29%**
4. **Wrong strategy, wrong execution (in part): 32%**

This frightening data set motivated us to look closely at the conventional wisdom at work regarding making and executing strategies. The first thing we did was recheck the numbers. Could the practice of strategy truly be as bad as the numbers indicated?

We asked MBA students across the country to describe the strategies in place at a variety of major vendors. Despite the fact that these students were encouragingly smart and hard-working and had recently been exposed to the very best in contemporary thinking about strategy, they were hard-pressed to come up with a consistent description of IT vendor strategy. Strike 1 for strategy occurs when people outside the organization can't figure out what your strategy is.

We asked employees in the CIOs' chains of command whether the stated strategies of their organizations materially affected their day-to-day workplace behaviors. More than 70% said they did not. While the top of the house might be in alignment regarding strategy, the people at the oars frequently are not. Perfect pictures of the future don't do anybody any good if they don't change behaviors. Strike 2 for strategy occurs when the behavior of people inside the organization isn't driven by strategy.

Conventional wisdom (a wonderful phrase first coined by John Kenneth Galbraith in *The Affluent Society*) has it that strategy and strategists have bounced back from a near-death experience in the 1980s, a coma during the whole dot-com boom-and-bust era, and the recent episode of carnivorous cost control. Strategy is very much back on the executive agenda. Unfortunately, senior executive behaviors regarding strategy-making and strategy-executing are all over the map.

In their very readable *Strategy Maps: Converting Intangible Assets Into Tangible Outcomes* (Harvard Business School Press, 2004), Robert S. Kaplan (my former professor) and David P. Norton (my former boss) provide a very understandable definition of strategy: "Strategy is based on a differentiated customer value proposition. . . . Strategy requires a clear articulation of targeted customer segments and the value proposition required to please them. Clarity of this value proposition is the single most important dimension of strategy." Strike 3 for strategy comes when organizations don't keep this very simple definitioo in mind.

As a futurist, I believe that all signs indicate that we have emerged into what tomorrow's business historians could term a strategic era, an era when firms have a big choice about their future evolution. Understanding and fixing broken strategy-making and strategy-executing processes will be a big part of determining whether that future is one you will enjoy. **54733**

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READERS' LETTERS

The End Is Not Near for Corporate IT

I DISAGREE WITH Nicholas Carr ["The End of Corporate IT," QuickLink 53976]. He states that smaller companies will find it difficult to buy their own systems, but in reality, prices are falling so that now even individuals can afford to buy computing power and storage.

Also, IT is not exactly a commodity, like gas or electricity. The major cost of IT at the moment and in the foreseeable future is application development and implementation of company-specific business logic. The cost of hardware and even software is a tiny fraction compared to this. Obviously, certain business architectures become standard and it makes no sense for a company to develop them on its own. The company may use a third-party "utility company," for example, to store and secure large amounts of data. Still, it would be difficult to "utilitize" company-specific logic and intellectual property.

Dmitri Nevedrov
Senior software engineer, Superior, Colo.,
dmitri_nevedrov@hotmail.com

I THINK CARR MISSES one important point: While electrical generation equipment moved to utilities, the machines used to produce the goods did not. Which parts of our IT infrastructures are a direct part of product delivery, and which just supply cycles, memory and reports?

Bob Hays
First vice president, enterprise architecture, ABN AMRO Services Co., Chicago,
Bob.Hays@abnamro.com

COMPARING COMPUTING to power generation is like comparing apples and oranges. Having been a victim of ASP usage gone wrong, I can tell you that for most business-critical apps, there is no way a company can rely on Internet-based outsourced services. The delivery is slow and sometimes nonexistent, and you still require most of the same infrastructure as if you provided the services for yourself (unlike power generation). There are some niches that these services can fill, but I wouldn't depend on them for running businesses or mission-critical applications ever again. It cost us lost productivity, and now we don't own the data produced by the ASP applications or the software for future referencing of the data generated.

Craig Smith
IT manager, West Chester, Pa.

For more letters in response to the Q&A with Nicholas Carr, go to our Web site.
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COMPUTERWORLD welcomes comments from its readers. Letters will be edited for brevity and clarity. They should be addressed to Jamie Eckle, letters editor, Computerworld, PO Box 9171, 1 Speen Street, Framingham, Mass. 01701. Fax: (508) 879-4843. E-mail: letters@computerworld.com. Include an address and phone number for immediate verification.

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WHEN YOU GOT last week's issue, chances are you read Patrick Thibodeau's Page One story about IT blogging being one-sided, with vendors adopting the medium much more assertively than users. And, like I was, you were probably struck by the comment of the Sun Microsystems executive, referring to the prospect of IT managers getting into it: "If a few of those guys started doing [blogs], you can darn well bet that we would be reading them."

DON TENNANT is editor in chief of *Computerworld*. You can contact him at don_tennant@computerworld.com.

That's a pretty safe bet, and it speaks volumes about why it's so unfortunate that corporate IT leaders appear to be so skittish about blogging. CIO blogs would command the attention of vendors across the IT board that would be eager to find out what their customers and prospective customers are saying about them and their competitors. Your expectations, demands, grievances and successes would be analyzed up one side and down the other — the subject of vendor staff meetings and strategy sessions, with you in the virtual director's chair.

Now don't get me wrong — my focus on the user side of the equation isn't intended to diminish for a heartbeat how impressive it is that several large IT vendors are encouraging their employees to blog. There appears to be a genuine interest on the part of vendors like Sun, Microsoft and IBM to establish a dialogue between their employees and their customers, and to do it with minimal restrictions.

It takes courage to do what these vendors are doing, because clearly there's a risk that bloggers will convey information that sheds a negative light on the company or create confusion in the market. A prime example of the latter occurred last August when Sun President Jonathan Schwartz, a loose cannon if ever there was one, made a statement in his blog that was widely interpreted as an indication that Sun was considering a plan to acquire Novell.

And then there's the concern about bloggers airing dirty laundry. After all, that's a standard *raison d'etre* of blogs. I can cite an example of that as well — one that hit mighty close to home.

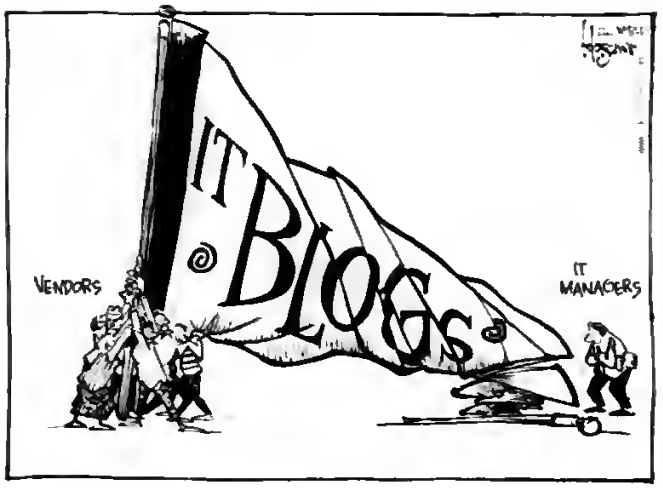
In October 2003, I read in Screenshots, a blog site in Malaysia run by a guy named Jeff Ooi, an apology by the editor of the Hong Kong edition of *Computerworld* for having plagiarized another writer. The admission and apology came only after Ooi had exposed the plagiarism in his blog. You have no idea how much I hated reading that.

I worked at *Computerworld Hong Kong* from 1990 to 2000 and served as the editor for more than eight of those years. During that time, a lot of very talented, dedicated people worked tirelessly to build that publication into what was unquestionably the premier IT newspaper in Asia. And in the blink of an eye, this idiot trashed everything we had done. I said as much in a blog entry I submitted to Ooi's site. I also commended him for exposing it and encouraged him to keep the heat on. As much as I hated what had happened, I became a big fan of blogs that day.

That's why I'm especially gratified by the launch last week of a new blog area on our Web site [QuickLink a5920]. I'll be joining other *Computerworld* editors and guest bloggers in an aggressive effort to expand our delivery of compelling content to you and your peers.

Here's hoping the blogging momentum will build. And that your company will help build it. **54781**

Don Tennant



The Case for The Portfolio Business Case

ARE YOU FINDING it more difficult lately to construct a good business case? Infrastructure managers are probably screaming, "Lately? For years!" But now it's becoming more difficult for development teams, too.

Part of this was caused by the "big package" revolution of the last decade. Getting every department that uses an ERP package, for instance, to contribute its portion of the upgrade costs is a hassle for most IT managers, especially when they hear, "We didn't ask for this, so we're not paying for it."

Now, other factors are starting to appear. Service-oriented architectures are a brilliant idea for advancing enterprise flexibility and speed to market. But they are a nightmare when it comes to tracing a stream of benefits in a department and tying them to the costs of common code.

BRUCE A. STEWART is a former CEO and one-time senior vice president and director of executive services at Meta Group Inc. He is now an executive adviser in Vancouver, British Columbia. He can be contacted at bruce@brucestewart.com.

It's time to rethink the business case, because the application as we've known it is dying and being replaced by a mix of infrastructure and middle layers with a little application code on top. Rather than a monolith that can be justified — and upgraded — as a unit, we have many moving parts, all on their own upgrade cycles.

Better CIOs have seized upon portfolio management to help them deal with reinvestment questions. The best among them have moved even beyond that to looking at the portfolio and the business value it supports as a whole and then making investment decisions to manage the top line (by increasing value generated) and bottom line (by decreasing the cost to deliver that value).

Rather than have each project justify itself, savvy CIOs ensure that the complete portfolio — investment and re-

investment — maintains a desired rate of return.

Coupled closely with this notion is the idea that qualitative business value — the gains you expect to be there but can't cleanly quantify — counts. Customer gains yield a revenue impact, hence a top-line gain in value for the portfolio, regardless of the cause. Likewise, it's the overall profile of the infrastructure supporting the business that matters, not whether one part of it is experiencing a temporary cost bubble due to upgrades.

If this sounds to you as though the CIO is running IT just as the business is run, you're right. Organizations must invest in themselves just to hold their market positions. They must develop new products and take the risk that the investment won't pay off. They must periodically replace worn plants and equipment, refurbish customer points of presence and match competitive customer-service initiatives. This holistic view is precisely what modern IT systems demand.

Some of the problems the portfolio approach solves include:

- How do we justify changes we're making to support our enterprise architecture?
- Where's the business value in reducing complexity, especially when it'll take years?
- How do we replace the old version of that core package when the clients don't want to pay for it?
- How do we justify infrastructure upgrades when there aren't enough new applications coming onstream to pay for them?

When you can say to a recalcitrant business peer, "We're doing this because it increases my ROI by 25%, and I'm not telling the CEO I'm leaving that money on the table," that's CIO power.

It's also a good way to demonstrate you're ready to run a business, not just IT. **54702**

THORNTON A. MAY

Companies Striking Out On Strategy

THE PROCESS for making and executing strategy in most organizations is broken. Conversations with business school faculty colleagues conducting research on companies based in Canada, Mexico and the U.S. indicate that 70% to 90% of enterprises fail to successfully execute their strategies. The decisions facing executives today truly do matter and will set the course for the next decade. Existing strategy making and strategy executing processes appear woefully unsuited to meet the challenge.

THORNTON A. MAY is a longtime industry observer, management consultant and commentator. Contact him at thorntonamay@aol.com

The IT Leadership Academy, drawing on research and executive interviews conducted at the CIO Executive Summits in New York and Southern California and at the CIO Boot Camp in Las Vegas, created a strategy diagnostic that parsed the world into four categories of organization:

1. **Right strategy, right execution:**
2. **Right strategy, wrong execution (in part):**
3. **Wrong strategy, right execution:**
4. **Wrong strategy, wrong execution (in part):**

This frightening data set motivated us to look closely at the conventional wisdom at work regarding making and executing strategies. The first thing we did was recheck the numbers. Could the practice of strategy truly be as bad as the numbers indicated?

We asked MBA students across the country to describe the strategies in place at a variety of major vendors. Despite the fact that these students were encouragingly smart and hard working and had recently been exposed to the very best in contemporary thinking about strategy, they were hard-pressed to come up with a consistent description of IT vendor strategy. Strike 1 for strategy occurs when people outside the organization can't figure out what your strategy is.

We asked employees in the CIOs chains of command whether the stated strategies of their organizations materially affected their day-to-day workplace behaviors. More than 70% said they did not. While the top of the house might be in alignment regarding strategy, the people at the ears frequently are not. Perfect pictures of the future don't do anybody any good if they don't change behaviors. Strike 2 for strategy occurs when the behavior of people inside the organization isn't driven by strategy.

Conventional wisdom (a wonderful phrase first coined by John Kenneth Galbraith in *The Affluent Society*) has it that strategy and strategists have bounced back from a near-death experience in the 1980s, a coma during the whole dot-com boom-and-bust era, and the recent episode of carnivorous cost control. Strategy is very much back on the executive agenda. Unfortunately, so most executive behaviors regarding strategy making and strategy executing are all over the map.

In the very readable *Strategy Maps: Converting Intangible Assets Into Tangible Outcomes* (Harvard Business School Press, 2004), Robert S. Kaplan (my former professor) and David P. Norton (my former boss) provide a very understandable definition of strategy. "Strategy is based on a differentiated customer value proposition. ... Strategy requires a clear articulation of targeted customer segments and the value proposition required to please them. Clarity of this value proposition is the single most important dimension of strategy." Strike 3 for strategy comes when organizations don't keep this very simple definition in mind.

As a futurist, I believe that all signs indicate that we have emerged into what tomorrow's business historians could term a strategic era, an era when firms have a big choice about their future evolution. Understanding and fixing broken strategy-making and strategy-executing processes will be a big part of determining whether that future is one you will enjoy. **54733**

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More columnists and links to archives of previous columns are on our Web site.

www.computerworld.com/columns

READERS' LETTERS

The End Is Not Near for Corporate IT

I DISAGREE WITH Nicholas Carr ["The End of Corporate IT," QuickLink 53976] He states that smaller companies will find it difficult to buy their own systems, but in reality, prices are falling so that now even individuals can afford to buy computing power and storage.

Also, IT is not exactly a commodity, like gas or electricity. The major cost of IT at the moment and in the foreseeable future is application development and implementation of company-specific business logic. The cost of hardware and even software is a tiny fraction compared to this. Obviously, certain business architectures become standard and it makes no sense for a company to develop them on its own. The company may use a third-party "utility company," for example, to store and secure large amounts of data. Still, it would be difficult to "utilize" company-specific logic and intellectual property.

Dmitri Nevedrov
Senior software engineer, Superior, Colo.
dmitri_nevedrov@hotmail.com

I THINK CARR MISSES one important point. While electrical generation equipment moved to utilities, the machines used to produce the goods did not. Which parts of our IT infrastructures are a direct part of product delivery, and which just supply cycles, memory and reports?

Bob Hays
First vice president, enterprise architecture, ABN AMRO Services Co., Chicago
Bob.Hays@abnamro.com

COMPARING COMPUTING to power generation is like comparing apples and oranges. Having been a victim of ASP usage gone wrong, I can tell you that for most business-critical apps, there is no way a company can rely on Internet-based outsourced services. The delivery is slow and sometimes non-existent, and you still require most of the same infrastructure as if you provided the services for yourself (unlike power generation). There are some niches that these services can fill, but I wouldn't depend on them for running businesses or mission-critical applications ever again. It cost us lost productivity, and now we don't own the data produced by the ASP applications or the software for future referencing of the data generated.

Craig Smith
IT manager, West Chester, Pa.

For more letters in response to the Q&A with Nicholas Carr, go to our Web site.

QuickLink 54755
www.computerworld.com

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COMPUTERWORLD HONORS PROGRAM 2005

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PAM FRANCIS

Witness to IT History

This permanent record of IT innovation serves as a tribute to the men and women who push technology's bounds. **By Mary K. Pratt**

INNOVATION HAPPENS ALL THE TIME. So much so that we sometimes overlook the significance of recent technological advances. Ten years ago, we marveled at the possibilities of the Internet, instant messaging and camera phones. Now, those innovations have become commonplace.

While we accept such advancements without hesitation, we should nonetheless take time to honor those individuals and institutions that bring them to the world.

The *Computerworld* Honors Program aims to do just that. It recognizes the men, women, companies and institutions that drive the IT revolution and records their positive impact on society.

"It's a chance to honor the folks who are doing terrific things for the advancement of society. Some of their achievements are absolutely remarkable," says *Computerworld* President and CEO Bob Carrigan.

The Chairmen's Committee, made up of CEOs and chairmen from the world's leading IT companies, in April announced this year's 160 laureates. Selected from more than 300 nominations, they come from leading corporations, schools, nonprofit organizations and government agencies.

A panel of judges consisting of leaders in corporate, government, academic and other organizations next chose 50 finalists in 10 categories: business and related services; education and academia; environment, energy and agriculture; finance, insurance and real estate; government and nonprofit organizations; manufacturing; media, arts and entertainment; medicine; science; and transportation.

Continued on page 24

Continued from page 23

Those finalists will attend tonight's awards gala in Washington, where the 10 winners from around the world, one in each category, will be announced.

"We really know we are going to represent best of class on a world basis," says Patrick McGovern, chairman and founder of IDG, *Computerworld*'s parent company.

McGovern says he established the Honors Program in 1988 to counter the negative reports about technology that dominated the general media. "We felt how unfair it was for society to hear those stories when so many were doing innovative things," he says.

The Honors Program seeks to record that history by preserving case studies, oral histories, conference proceedings, publications, videotapes and other recordings related to the recognized innovations. These documents — available both online and through donations to affiliated universities, libraries and research institutions around the world — serve as rich resources for scholars and other interested individuals.

The program has grown significantly in the past 18 years, and the list of laureates is nothing short of extraordinary. Consider these diverse examples: The Egyptian Ministry of IT and Communications was named a laureate in 2004 in the government category for its work with a single, unified e-government portal that allows citizens and potential investors to directly access the services they need.

The Bayfront Medical Center in St. Petersburg, Fla., was a laureate in 1998 in the medicine category for its comprehensive Web site that acts as a community health care resource. And the Non-toxic and Bio-Integral Resource Center in Berkeley, Calif., was a laureate in 1992 in the science category for its unique databases detailing nontoxic and least-toxic alternatives to certain pesticides.

As for the negative reports about technology, McGovern sees them increasingly being supplanted by stories about how IT improves our lives in countless ways. "The incidents of the bad news stories have seemed to disappear," he says. "Now you see a lot of coverage about applications that are beneficial to the company and the quality of life for people." **54400**

Finalists

We profile a small selection of the finalists on these pages; the complete list of 47 finalists is on our Web site:
QuickLink 54707
www.computerworld.com

Environment, Energy & Agriculture:

Shell Oil Products US

Designed for customers, an online portal delivers unexpected savings.

When Shell Oil Products US and associate company Motiva Enterprises LLC decided to condense three customer portals into one, the objective was to better serve customers.

But the new Shell Source portal also created savings and efficiencies beyond those initially envisioned, says Frank J. Trogus, CIO at the two Houston-based fuel companies. "When you put in a system in like this, there are a lot of unintended benefits," he says.

Shell Source has reduced IT support costs by 15% and saved $5 million annually in printing and mailing costs. In addition, with only one portal to maintain, the IT group is able to do more preventive maintenance on the system. The company has also been able to push content to customers, including gas stations, wholesalers and dealers, through the Web site quicker.

Meanwhile, customers can manage their accounts in real time at a single site. "Success is based on how this is taken up by the customers, and it has been taken up very well," Trogus says.

Building such success took a collaborative spirit between IT and the business units, Trogus says. Still, challenges existed. IT had to link disparate systems, and business units and customers had to adopt standard business processes.

Trogus says Shell and Motiva made a big investment in systems, interfaces and upgrades; he wouldn't disclose the exact amount but says multiple millions of dollars were spent. The system went live in late 2003 "and has already paid for itself," Trogus says.

And even though Shell Source is considered a benchmark portal, Trogus says the system was designed to be flexible so it could "morph into the next generation." **54561**

Manufacturing:

Premier Manufacturing Corp.

A paper process is ditched in favor of an automated data-collection system, saving $150,000 annually.

David Scott, CIO at Premier Manufacturing Corp. in Cleveland, saw a chance to save $150,000 annually by automating a data collection process that had been done manually.

But Scott's decision did significantly more than that: The shop-floor monitoring system, known as FactoryMRI, also increased manufacturing capacity by 7% and labor efficiencies by an estimated 15% while reducing annual setup costs by $130,000 and defects by 50%.

"We're saving hundreds of thousands of dollars annually with this," Scott says. "It's paid for itself already."

Premier Manufacturing, which fabricates wire products, employs about 500 people at three U.S. locations. Its production workers had tracked information on paper, writing down what they did, the time it took, the volume produced and other information. Another dozen or so people handled these production cards — hundreds of them every day — using them to analyze production information and calculate workers' incentive-based pay.

"As any CIO is supposed to do, I looked at it and saw that it was wasteful," Scott says, adding that he initially calculated that the company spent $3,000 a week just to handle those cards.

So in 1999, Scott decided to automate the process. When he didn't find any off-the-shelf technology products, he teamed up with Progress Software Corp. in Bedford, Mass., to develop, deploy, integrate and manage an application. Premier Manufacturing spent about $800,000 on the project, which was implemented within nine months, Scott says.

The company continues to add features and see benefits. In addition to collecting production data of all sorts, the system can even help detect when production workers are fatigued, Scott says, based on their performance rates.

"We keep finding new analyses, reports and tools we can do with this," Scott says. "So for the past four or five years, it's been a continuous improvement path we've been on." **54582**

Education & Academia:

University of North Carolina, School of Information and Library Science

An eclectic mix of digital content, managed by its contributors, helps advance information sharing.

Ibiblio has been a leader in cyberspace for some time. Started as Sunsite.unc.edu in 1992 and housed at the University of North Carolina at Chapel Hill, Ibiblio is a contributor-run digital library whose eclectic collection of material remains a standout on the Internet.

Ibiblio's diverse mix is more than a curiosity, though. It advances the sharing of information.

"Our goal is to facilitate the distribution of knowledge to the people of North Carolina and, as far as possible, the people of the world," says Paul Jones, Ibiblio's director and a clinical associate professor at UNC's School of Information and Library Science.

Today, Ibiblio has more than 1,500 collections of sharable information, distributes over a terabyte of open-source and free software, and handles more than 12 million requests daily from people downloading software, listening to music and reading Web pages.

Ibiblio also plays a significant role in research and innovation. For example, it pioneered Internet radio in 1994 by putting online a digitized simulcast of WXYC, UNC's student radio station.

These advances have come with challenges. For example, Jones has to handle claims of copyright violations, and while true violations have been few, he says, dealing with false claims is time-consuming.

None of this, however, is hindering Ibiblio's present or future. Jones says Ibiblio will continue to evolve as demands for information change. And how it looks in 10 years will undoubtedly be different, he says, because technology will change. But, he adds, the principles that have shaped Ibiblio so far — a dedication to freely sharing information at a site managed by contributors — will remain. **54565**

Education & Academia:

University of Michigan, College of Pharmacy

A Web-based teaching tool gives medicinal chemistry students more-interactive study materials.

Mustapha Beleh saw limits in standard teaching tools like blackboards, overhead projections and PowerPoint presentations. They give only two-dimensional glimpses to concepts that deserve 3-D explanations.

So Beleh developed the Medicinal Chemistry Virtual Library, a Web-based teaching tool designed to give more-detailed information to students at the University of Michigan's College of Pharmacy.

The site has lecture notes with an interactive component that allows students to move with just a click from a concept mentioned in one course to the in-depth explanation that happened in another.

Other features include tutorials given in Flash format and online practice quizzes that determine the question sequence based on student answers. It also has libraries that detail the chemical structures of all clinically available drugs along with their generic and trade names, and links to sound bites to correct pronunciations.

Beleh is adding virtual labs to the site so students can see what happens inside an experiment — something they can't always see in a real lab.

Beleh, who is a lecturer at the university and a pharmacist, started to work on the Medicinal Chemistry Virtual Library when he first arrived at the University of Michigan in 1999. He did much of the technical work himself. And while Beleh relied on university-developed tools, he says he frequently asked developers to modify the tools so they'd do what he wanted.

Beleh plans to add material from classes beyond the four-course medicinal chemistry sequence. He also wants to develop modular applications so faculty members who aren't technically skilled can easily work with an interface to get their information online. And he wants to expand the concept beyond the University of Michigan. "I haven't seen anything close to this," he says, "so I think it would be a very useful tool to others." **54563**

Science:

International AIDS Vaccine Initiative Inc.

Critical AIDS vaccine information is transmitted from multiple remote sites to centralized databases.

The Pan-African Resource Network connects 300 scientists, researchers and other clinicians at about a dozen sites in five African countries. Its goal is to increase the speed and efficiency of data sharing, which is essential in the search for an AIDS vaccine.

"It definitely accelerates the search for an AIDS vaccine," says Ronaldo Lima, senior director of IT at International Aids Vaccine Initiative Inc. (IAVI), a New York-based nonprofit organization.

IAVI operates as a hub for AIDS vaccine research and development. As part of its mission, the 9-year-old organization is implementing a reliable IT infrastructure to transmit clinical and laboratory data from multiple remote sites to centralized databases.

Lima says establishing this connectivity in sub-Saharan Africa presents challenges that don't exist in developed countries. Existing computer networks aren't always reliable, the electricity supply can be undependable, and government regulations often slow the implementation of new technologies.

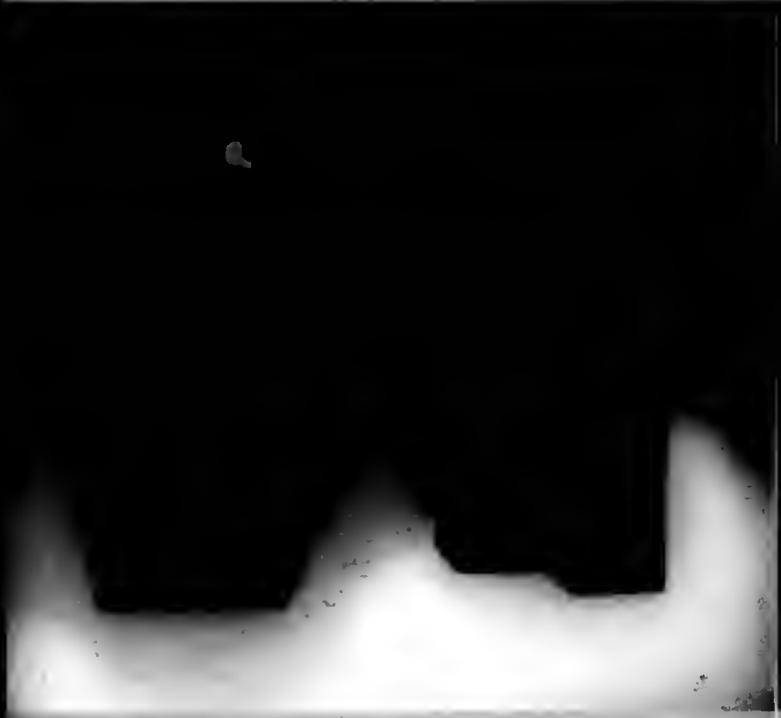
The Pan-African Resource Network, which dates back to 2002, has to contend with those issues and do so in a cost-effective way, Lima adds.

The solution involves the use of hybrid network systems that increase the reliability and cost-efficiency of long-distance data transmissions. IAVI workers consider the bandwidth, technology and service reliability in each region when deciding on systems. They opted for a radio link Internet connection in Rwanda, but they used a satellite connection in Uganda.

While Lima says this network can speed the development of an AIDS vaccine, he sees benefits well beyond that: "Even after we have an AIDS vaccine, all this capacity-building will help people have more access to information and knowledge." **54564**

Pratt is a Computerworld contributing writer in Waltham, Mass. Contact her at marylpratt@verizon.net.

Innovations by InterSystems



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Whirlpool CIO says the company's supply chain projects have earned it a competitive advantage.

MICHAEL ABRAMSON

SUPPLY CHAIN Whirl

Five years ago, **Whirlpool** began an effort to turn around its global supply chain. The company is seeing results, but it's not done yet.

By Gary H. Anthes

THE SUPPLY CHAIN at Whirlpool Corp. in 2000 was broken. Indeed, a manager there at the time quipped that among the four major appliance makers in the U.S., Whirlpool ranked fifth in delivery performance.

"We had too much inventory, too little inventory, wrong inventory, right inventory/wrong place, any combination of those things," says J.B. Hoyt, who was then supply chain project director. He says a sales vice president approached him one day and said he'd accept even worse performance from supply systems if they would just be consistent rather than wildly bouncing back and forth between good and poor production and shipping plans.

So in 2001, Benton Harbor, Mich.-based Whirlpool embarked on a multiproject global overhaul of its supply chain systems. The metaproject remains a work in progress today, with a number of systems yet to be rolled out and some major technical issues to be resolved. But managers at Whirlpool say its success to date — including huge improvements in customer service and reduced supply chain costs — is providing the psychological and financial impetus to drive the remaining systems work.

Whirlpool CIO Esat Sezer says that by 2000, the company had grown by acquisition and geographic expansion to the point that old systems, stitched together by spreadsheets and manual procedures, couldn't cope with the exploding complexity. "Our supply chain was becoming a competitive disadvantage for us," he says. Availability — the percentage of time a product is in the right place at the right time — was an unacceptably low 83%, even as inventories remained too high overall.

The homegrown supply systems were primitive and not well integrated with the company's SAP ERP system, which had been installed in 1999, or with a legacy production scheduling system, Sezer says. And they weren't integrated with the systems of major wholesale customers or suppliers of parts and materials. "The plans we were creating weren't linking back into reality," he says.

FIELD REPORT

In particular, Sezer says, supply chain systems weren't fine-grained enough, nor were they very good at juggling priorities and constraints except through slow and cumbersome manual methods. Often, they would optimize locally — a single product line at one location, for example — but not for the supply chain as a whole.

Here's what Whirlpool was using for its North American supply chain in 2000:

- A homegrown production scheduling system, the Whirlpool Manufacturing Control System (WMCS), which was developed in the mid-1980s and extensively modified over the years.
- SAP AG's R/3 ERP system, which was installed in 1999 and used for transaction-processing applications such as accounting and order processing.
- i2 Technologies Inc.'s Demand Planner (now called Demand Manager), which was installed in 1997 and used for demand forecasting.
- A system for distribution planning that was custom-developed for Whirlpool in the 1980s that used optimization software from ILOG Inc.

Then, in 2001, Whirlpool began to implement an advanced planning and

TRANSFORMATION TIMELINE

2001
Integrate supply chain transaction-processing applications using SAP's R/3 ERP systems.

2002
Begin companywide standardization, with SAP and IBM as strategic partners. Goals: Cost savings and simplification of systems.

2003
Integrate and improve supply chain planning and optimization with i2 products in North America. Customer service levels soar and costs fall.

2004
Integrate with systems of major trade partners Sears, Best Buy and Lowe's using an i2 Web collaboration tool. Demand forecasts improve dramatically.

2005
Integrate and improve supply chain planning and optimization with SAP products in Europe. Goals: Improve product availability and reduce costs.

Still to be Done

- Latin American supply chain using SAP software
- with major suppliers and SAP Web tools
- plus custom products to the tuning system with SAP
- European system at the factory level
- 2 vs. SAP issues in North America

Whirlpool's North American Supply Chain Is Complex

- 3,000-plus distinct products
- 11 domestic manufacturing facilities
- 11 factory and 10 regional distribution centers
- Thousands of retail and contract customers
- 75,000 appliances shipped per day

scheduling (APS) system. It included a suite of supply chain integration and optimization tools from i2 — Supply Chain Planner for Master Scheduling Deployment Planning and Inventory Planning. Those three modules, the heart of Whirlpool's efforts to fix its supply chain, went live in three phases over 2001 and 2002.

In mid-2002, Whirlpool installed the i2 TradeMatrix Collaborative Planning Forecasting and Replenishment (CPFR) system, a Web-based collaboration tool for sharing and combining the sales forecasts of Whirlpool and its major trade partners — Sears, Roebuck and Co., Lowe's Cos. and Best Buy Co.

The rollout of a component for Web-based collaboration with suppliers, based on SAP's Inventory Collaboration Hub, is just getting under way. And Whirlpool continues to use the old WMI'S for production scheduling but plans to replace that with SAP's Production Planning module.

It's Available

By all accounts, the supply chain overhaul was a smashing success for the $13 billion company. CPFR cut forecasting errors in half. APS boosted availability in North America from 83% to 93% (it's at 97% today), reduced finished-goods inventories by more than 20% and trimmed 5% from freight and warehouse costs. Whirlpool declined to discuss the cost of the projects.

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Sezer says that in the four years since Whirlpool standardized on IBM and SAP as "strategic partners," revenue has increased on average $1 billion per year and IT expenses have fallen 6% per year. He says there are several joint development projects under way involving all three companies.

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54566

Think Globally, Act Locally

WHEN THE TIME CAME for Whirlpool Europe to overhaul its supply chain, the company decided not to go with i2 optimization products, as North America had done, but with SAP's Advanced Planner and Optimizer (APO) for demand and supply-network planning.

Vivek Mehta, a lead supply chain analyst involved in both projects, says Europe was starting from a more primitive systems base, with even more manual procedures and less-integrated systems than had been the case in North America. So for Europe, "APO was a huge step forward," he says.

The integration of Whirlpool Europe's supply chain systems around APO, though not quite complete, has already boosted inventory availability from less than 80% to more than 90%, says Walter Manfredi, supply chain director in Whirlpool's Comerio, Italy, operations center.

"Today, our supply chain is integrated – processes and systems," he says. "Now, demand from a trade partner or customer is integrated into production planning. We can look into production plans and see if this item for this date in this quantity is for this customer. So we can now give priority depending on the type of demand."

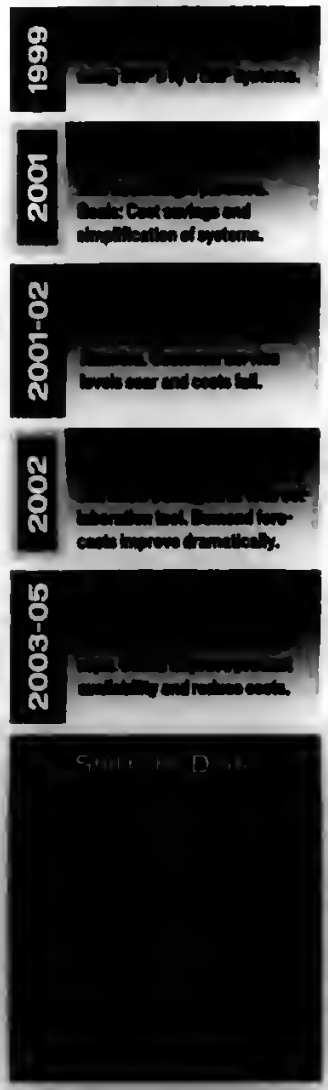
For example, he says, priority is always given to production orders earmarked for specific customers – for which availability is now 97% – over orders to simply replenish stock.

Still, improvements need to be made, especially at the level of individual factories, Manfredi says. Some factory managers, in an attempt to tweak system rules and parameters to optimize their operations, make the systems so complex that they become maintenance nightmares. And, he adds, attempts by factories to optimize their own performance can be at odds with optimizing the European supply chain overall.

Finally, Manfredi says, while production can be varied daily by altering system rules and parameters, some production modifications require workforce changes or changes in line and equipment capacities, which can take weeks to accomplish. "That's very difficult," he notes.

– *Gary H. Anthes*

TRANSFORMATION TIMELINE



scheduling (APS) system. It included a suite of supply chain integration and optimization tools from i2 — Supply Chain Planner for Master Scheduling, Deployment Planning and Inventory Planning. Those three modules, the heart of Whirlpool's efforts to fix its supply chain, went live in three phases over 2001 and 2002.

In mid-2002, Whirlpool installed the i2 TradeMatrix Collaborative Planning, Forecasting and Replenishment (CPFR) system, a Web-based collaboration tool for sharing and combining the sales forecasts of Whirlpool and its major trade partners — Sears, Roebuck and Co., Lowe's Cos. and Best Buy Co.

The rollout of a component for Web-based collaboration with suppliers, based on SAP's Inventory Collaboration Hub, is just getting under way. And Whirlpool continues to use the old WMCS for production scheduling but plans to replace that with SAP's Production Planning module.

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The company's lab is working on a broad range of technologies, from coin-size Web servers to 4-PFLOPS supercomputers. By Gary H. Anthes

Sun's R&D Spectrum

MENTION Sun Microsystems Inc. to someone, and it's likely to evoke images of high-powered workstations, dot-com servers and Java. But a peek inside Sun Microsystems Laboratories reveals a much broader array of emerging technologies and hints at a new Sun rising.

Sun Labs in Menlo Park, Calif., employs some 200 scientists and engineers and spends $80 million to $100 million a year. Its projects include sensors, supercomputers, high-speed networking, optical interconnects, third-generation Web technologies, Java and more. Its mission: "To solve hard technical problems brought to us by our customers," says Glenn T. Edens, director of Sun Labs.

FUTURE WATCH

Making the Switch

For example, Internet switches capable of handling tens to hundreds of terabits of traffic per second today cost millions of dollars and fill entire rooms. But if an ongoing project at Sun Labs is successful, such switches will have dimensions and price tags more like those of PCs. "It's a high-risk, high-return project. We think it will work, but we don't actually know," Edens says.

Ultracheap, high-capacity switches are just one potential application of a technology called proximity communication that Sun announced last fall. Proximity I/O, as it's also known, can enable processor chips to communicate 60 times faster and with 30 times less energy than is possible using conventional means.

"Proximity allows us to very nicely spread a switch out over a number of chips and have enough bandwidth between them so we can have a distributed switch," says Robert Drost, a research scientist at Sun Labs. "Proximity" refers to the positioning of two chips extremely close to each other, each with transmitter and receiver circuits. Data is sent across the gap by "capacitive coupling," which is coupling between charged particles that are at rest. It's simple in principle, but it's devilishly difficult to align the chips to tolerances of a few microns.

In proximity I/O, the long communication paths on printed circuit boards with soldered connections and wires are replaced by the tiny, simple interchip gaps. "When processors went from 10 MHz to 3 GHz, they didn't become 30 times faster, because the bandwidth didn't increase by 30 times; it increased by two or three times," Drost says. "[Proximity I/O] will finally realize the potential performance on the chip."

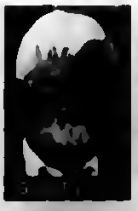
In addition, he says, very fast interchip communications could reduce the need to have big on-chip caches, freeing up scarce chip real estate for other kinds of processing functions.

Supercomputers

Last July, Sun won a three-year, $50 million contract from the Defense Advanced Research Projects Agency to design a supercomputer with ultrahigh internal bandwidth based on proximity I/O. IBM and Cray Inc. each won awards for designs based on different principles.

Drost says the supercomputer will be "massively parallel," with hundreds of thousands of threads executing in parallel. It will excel at problems that require a lot of interprocessor communications, such as database searches, scientific simulations and signal processing. If Sun wins approval to build a working machine in the next phase, one or more prototypes could be installed by 2007, Drost says. Those machines would run at sustained speeds of 1 quadrillion floating-point operations per second (PFLOPS), about 15 times faster than the fastest supercomputer today, and be scalable to 4PFLOPS.

Sun Labs is working on computers at the other end of the spectrum as well, and it claims to have developed the world's smallest secure Web server. Code-named Sizzle, the server is the size of a quarter and is intended to go inside home appliances, personal medical devices, sensors and the like. It's a battery-powered, wireless device with an eight-bit processor, 128KB of flash memory and 4KB of RAM.



Others have built tiny Web servers, but what distinguishes Sizzle is its use of elliptic-curve cryptography (ECC), which is more efficient than RSA cryptography and hence more suitable for compute-challenged processors.

Users of the industry-standard RSA have moved to 1,024-bit encryption keys and will eventually have to move to 2,048 bits to ensure that the keys aren't broken. Every doubling of key length requires an increase of computer power by a factor of eight.

But ECC at comparable strengths is 10 times faster than 1,024-bit RSA keys and 38 times faster than 2,048-bit RSA keys, says Vipul Gupta, a senior engineer at Sun Labs. "The next generation of Internet devices, such as sensors, are expected to be even less capable than phones, and these devices just don't have the horsepower for RSA," he says.

Gupta has worked with the Internet Engineering Task Force to get ECC integrated into the Secure Sockets Layer encryption protocol, just as RSA has been integrated with it. Now, he says, developers can write software that interoperates with Sizzle as easily as with any other secure server. Applications include battlefield sensors, personal medical devices and radio frequency identification tags for confidential situations.

Gupta says ECC may find applications in large servers as well. A big e-commerce company such as Amazon.com Inc. could get by with a quarter to half as many servers if it used ECC rather than RSA, he says.

Security isn't the only thing Sun Labs is trying to get to work on tiny computers. Its Project Epsilon is based on the belief that real applications of sensor networks are scarce because sensors communicate unreliably and are hard to configure and program.

"We are working on how to program these things," Edens says. "And we're working on radio protocols, because IP was developed with no thought to power savings, and we are working on how do you upgrade software if you have 10,000 of these."

The answer to some of these questions is Java, Sun says. Java will bring interoperability and ease of code migration, says Randy Smith, a principal investigator at Sun. But it's not easy, he acknowledges. The key is getting Java to run on bare metal — no operating system. "It's a shoehorning thing," Smith says. QuickLink 54173

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A DIY Project for Network Security

With sparse resources, our security manager has to do things herself. But a call has her feeling like part of the team. By C.J. Kelly

THE PAST few weeks have been frustrating and rewarding all at the same time. I had set a goal to configure an intrusion-detection system (IDS) using the de facto standard, Snort on Linux. In our environment, we have very little in the way of security tools and devices, and little or no budget to procure such items. This project was the first step in being able to detect potentially malicious network traffic as inexpensively as possible.

SECURITY MANAGER'S JOURNAL

Having never done this personally because I previously managed engineers who knew how, and currently having no security-savvy staff to rely on, I was both tentative and excited.

I did several things to prepare. I found a white paper explaining the steps in detail. I figured that, if nothing else, I could follow directions. I also purchased and read a book, *The Tao of Network Security Monitoring: Beyond Intrusion Detection*, by Richard Bejtlich (Addison Wesley Professional, 2004).

I also met with a friend and colleague, a CISSP and information security officer at a small company, who I knew had been running a similar system for many years. I tried to work my way through the Snort manual but then quickly put it aside as a reference for when I had the system configured and running.

Dumb Frustrations

The system is now in production and is producing volumes of data. The challenge is to analyze this data and make sense of it.

There were so many small frustrations along the way that, at this point, I feel only relief that it appears to be working. I had what I call "dumb" frustrations.

For instance, I had a hard time downloading the enormous Red Hat Fedora Core 3 image files and burning those files to CD in the proper format. After numerous attempts and a dozen CDs that wouldn't boot, my colleague created a set of CDs for me to use.

Once the Linux operating system was installed, I realized that I couldn't remember Linux bash commands, so I printed a cheat sheet. Fortunately, the vi text editor commands came back to memory quickly. I followed the directions for installing the additional software needed for the system, step by step by step, then rebooted.

The system appeared to hang at a particular point, so I searched the Linux-newbie newsgroups for a solution. I never did find the exact solution, so I decided that I had done something wrong and rebooted using the rescue CD.

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Things went downhill from there, as I manually edited various configuration files based on the advice found online. My efforts ended in disaster, and I had to reinstall the entire system. Fortunately, it went a lot quicker the second time around, and I was able to pinpoint small mistakes I had made along the way the first time and correct them.

At long last, I could view the IDS alerts via HTTP and use Secure Shell to get into the system remotely. At the last minute, I realized that I had only one network interface card (NIC) in the system. D'oh! You have to have two.

One NIC runs in promiscuous mode and doesn't have an IP address. Its job is to receive traffic from the switch span port it's attached to. The additional NIC is necessary for remote administration of the system and is connected to a switch management port. I scrambled around for a NIC, shut the system down, installed the card and brought the system up again. Everything worked.

Managers With Depth

I thought a lot about the role of the information security manager while I was working on the IDS. I've noticed that in some companies, the security manager isn't expected to have technical depth, only astute management skills.

I have always believed that technical managers need to have enough depth to be able to back up the staff when a key employee has been lost or the situation demands an extra pair of hands and eyes.

That's a very tall order when you think about the array of security devices: virtual private network concentrators, firewalls, routers and switches, access control and authentication mechanisms, intrusion detection and prevention, antivirus, antispam and so on. In an ideal world, there would be sufficient staffers with varied skills who could cross-train one another.

I am in a situation where there is no security expertise and very little network expertise. It's good news, bad news for me.

On the one hand, I have days of frustration, knowing that the buck stops with me.

On the other hand, I have days of pure fun while I hunt for solutions to network performance and security issues and implement them.

This past week was particularly good because I received a phone call from the information security officer of the department that my agency is a part of. I think his position is about three levels down from the governor's office, give or take a level. The officer wanted to garner my assistance for disaster recovery plans. He also realized that as a CISSP, I might be able to collaborate with one of his employees, who is also a CISSP.

Together, be proposed, we could create a security incident response team structure and find solutions to security problems within the state network, such as acceptable-use violations (i.e., surfing and downloading pornography).

This was the first time I had heard that anyone in any state agency was actually looking to be proactive in regard to securing individual agency networks. I was excited to learn that years ago, they had gone down the same path that I'm on now and that they were happy to share their experiences. I felt, at that moment, that maybe I do fit in here.

WHAT DO YOU THINK?

This week's journal is written by a real security manager, "C.J. Kelly," whose name and employer have been disguised for obvious reasons. Contact her at mscjkelly@yahoo.com, or join the discussion in our forum: QuickLink a1590

To find a complete archive of our Security Manager's Journals, go online to computerworld.com/secjournal

SECURITY LOG

Worm Poses as IT Administrator

[illegible]

NIC Delays Crypto System

[illegible]

RFID Model Aims For Drug Safety

[illegible]

BRIEFS

Meridian Launches Proliance for ILM

■ Meridian Systems in Folsom, Calif., announced Proliance 3.0. The Web-based information lifecycle management software is designed to integrate facility and project management functionality and is built on a service-oriented architecture. XML technology supports a workflow engine in the software that drives business process management across all Proliance applications, according to Meridian. The product also includes a business intelligence layer with key performance indicators, dashboards and rollup reporting. Pricing ranges from $1,500 to 2,500 per seat.

Oracle Announces Financial Hub Tool

■ Oracle Corp. last week released its Financial Consolidation Hub. The product, which will be included in Oracle's Corporate Performance Management suite of analytic applications, is designed to automate the financial consolidation cycle, from data submission to the dissemination of consolidated results, according to the company. The hub, which is available now, is built on a unified enterprise data model that's used in all of Oracle's CPM applications. Pricing is $50 per license with a minimum of 2,000 licenses.

AppRiver Unveils E-mail Service

■ E-mail security vendor AppRiver LLC in Gulf Breeze, Fla., has announced a new SecureTide e-mail management service that incorporates antispam, antivirus and content management tools. The product's content management tools allow monitoring and enforcement of e-mail usage policies without additional hardware or software, according to the company. SecureTide is priced at about $675 per year for 50 users but will be available to existing AppRiver customers at an additional cost.

MARK WILLOUGHBY

The Operating System As Cult Classic

NEGLECTED COMMUNITIES, be they small towns or virtual ecosystems, shrink and die in much the same way. Names and faces disappear, and real estate becomes empty.

In the physical world, over time, windows break, shingles tear off and loose items bang in the wind. Signs of atropby appear more quickly in the virtual world. Web site links return the dreaded "Page cannot be found" screen, and the information that can be found is out of date and has clearly been neglected.

OS/2 user groups in the U.S. know neglect. They are diehards championing a doomed technology and maintaining their loyalty even as the operating system recedes from the IT landscape.

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Despite all these virtues, the OS/2 clock is ticking. The "VOICE Newsletter" had almost 900 subscribers in 1999-2000, but that number has dropped off to about 750. And the IRS has denied Warpstock Inc. nonprofit tax status because the event promotes a commercial product, even though IBM does "absolutely nothing" to officially support the product, according to Dodel. The most recent blow came when a vintage computer group told Dodel, who was planning an OS/2 museum for this year's Warpstock, that "OS/2 is too new to be considered vintage."

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BRIEFS

Meridian Launches Proliance for ILM

■ Meridian Systems in Folsom, Calif., announced Proliance 3.0. The Web-based information lifecycle management software is designed to integrate facility and project management functionality and is built on a service-oriented architecture. XML technology supports a workflow engine in the software that drives business process management across all Proliance applications, according to Meridian. The product also includes a business intelligence layer with key performance indicators, dashboards and rollup reporting. Pricing ranges from $1,500 to 2,500 per seat.

Oracle Announces Financial Hub Tool

■ Oracle Corp. last week released its Financial Consolidation Hub. The product, which will be included in Oracle's Corporate Performance Management suite of analytic applications, is designed to automate the financial consolidation cycle, from data submission to the dissemination of consolidated results, according to the company. The hub, which is available now, is built on a unified enterprise data model that's used in all of Oracle's CPM applications. Pricing is $50 per license with a minimum of 2,000 licenses.

AppRiver Unveils E-mail Service

■ E-mail security vendor AppRiver LLC in Gulf Breeze, Fla., has announced a new SecureTide e-mail management service that incorporates antispam, antivirus and content management tools. The product's content management tools allow monitoring and enforcement of e-mail usage policies without additional hardware or software, according to the company. SecureTide is priced at about $675 per year for 50 users but will be available to existing AppRiver customers at no additional cost.

The Operating System As Cult Classic

NEGLECTED COMMUNITIES, be they small towns or virtual ecosystems, shrink and die in much the same way. Names and faces disappear, and real estate becomes empty.

MARK WILLOUGHBY, CISSP, is a 20-year IT industry veteran and journalist. He can be reached at mwilloughby@mwgroup.com.

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Beyond Business Intelligence: Using Enterprise Analytics to Drive Fact-Based Decisions

Dallas, Texas · June 21, 2005

Renaissance Dallas Hotel · 2222 Stemmons Freeway

7:45am to 8:15am	Registration and Networking Breakfast
8:15am to 8:25am	**Introduction and Overview** Julia King, Executive Editor, Events, Computerworld
8:25am to 8:55am	**Trends in Enterprise Analytics** Henry Morris, Vice President and General Manager, Integration, Development and Application Strategies, IDC
8:55am to 9:25am	**Case Study: Quaker Chemical** Irving "Bubba" Tyler, Vice President and CIO, Quaker Chemical
9:25am to 10:15am	**How Technology is Transforming Business Intelligence** Keith Collins, SVP and Chief Technology Officer, SAS Michael Tillema, Business Intelligence Strategist, Intel
10:15am to 10:45am	Refreshment and Networking Break
10:45am to 11:15am	**Case Study: United States Census Bureau** Blake Sanders, Branch Chief of System Design and Support, Foreign Trade Division, United States Census Bureau
11:15am to Noon	**Panel Discussion: From Gut Feel to Fact-Based Decisions: Real-Life Business, Political and Technology Lessons Learned on the Front Lines of Enterprise Analytics** Moderator: Julia King, Executive Editor, Events, Computerworld Panelists: · Irving "Bubba" Tyler, Vice President and CIO, Quaker Chemical · Blake Sanders, Branch Chief of System Design and Support, Foreign Trade Division, United States Census Bureau · Henry Morris, Vice President and General Manager, Integration Development and Application Strategies, IDC · Keith Collins, SVP and Chief Technology Officer, SAS · Michael Tillema, Business Intelligence Strategist, Intel
Noon	Program Concludes

Selected speakers include:

Irving "Bubba" Tyler
Vice President and CIO, Quaker Chemical

Keith Collins
SVP and Chief Technology Officer, SAS

Michael Tillema
Business Intelligence Strategist, Intel

Julia King
Executive Editor, Events, Computerworld

This program will also take place in:

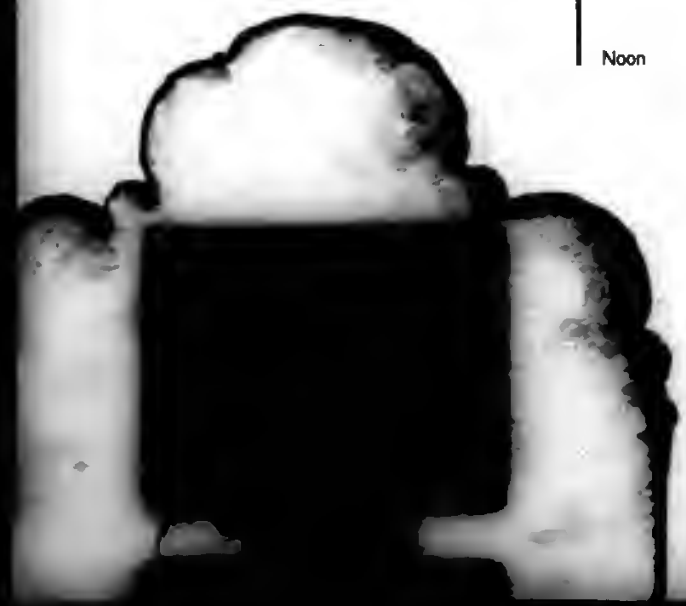
Newton, Massachusetts
June 28, 2005

Washington, DC
July 12, 2005

Chicago, Illinois
July 26, 2005

New York, New York
August 9, 2005

San Francisco, California
September 20, 2005



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MANAGEMENT

06.06.05

Oil and Water
Voice and data teams just don't seem to mix well, and CIOs face a tough task in bringing them together to handle network convergence projects. **Page 40**

Think Tank
A management consultant suggests training IT staffers to solve their own problems instead of running to the manager's open door; and a new book describes one man's turnaround strategy for the "most unpopular organization in America." **Page 42**

OPINION
Lenses on Leadership
Your view as an IT manager depends on which lens you're looking through, says Paul Glen. He offers some examples to help sharpen your vision. **Page 45**

DAVID GOLDIN

The WOW

IT is moving hotels into the 21st century. By Kathy Chin Leong

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He's right. There are flat-panel LCD televisions in bedrooms and bathrooms, Cisco voice-over-IP telephones for voice and data communications, in-room faxes and printers, Xboxes and video games, desk-side multimedia panels to plug in digital cameras, PCs, Apple iPods, wireless high-speed Internet access, DVD and CD players, wireless keyboards to turn televisions into monitors and Bose docking stations to amplify MP3 players.

"What we have implemented will be the standard for all our new properties from now [illegible] says Cruz.

At the crux of the design is the blueprint for a [illegible] integrated voice and data network that runs over IP. Hong Kong-based Mandarin Oriental International Ltd. expects the technology to last for the next eight to 10 years.

Hotels are moving into the 21st century, electrifying rooms with enough of a high-tech "wow" factor to keep guests coming back. With more than 15 million [illegible] subscribing to Digital [illegible] Line service, hotel [illegible] must [illegible] computing [illegible] vices on [illegible] guests use [illegible] their homes [illegible]

In [illegible]

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Hotels are moving into the 21st century, electrifying rooms with enough of a high-tech "wow" factor to keep guests coming back. With more than 15 million North Americans subscribing to Digital Subscriber Line service, hotel executives know they must offer computing and communications services on par with what guests use in their homes and offices.

In additional to guest-room enhancements, fundamental computing and networking changes are reshaping office operations in the $16 billion U.S. hotel industry. Hotels are chucking older systems in favor of Web-based applications that integrate data so employees can obtain a guest profile without looking up 30 different files across 30 applications, says Doug

Rice, president of Hotel Technology Next Generation in Inverness, Ill. Nine hotel IT executives formed HTNG in 2003 to encourage their peers and vendors to work together to successfully provide hotel technology. Key players include Marriott International Inc., Global Hyatt Corp. and Mandarin Oriental.

"The problem in our industry is that there are so many fragmented buyers and suppliers," Rice says. "A hotel can have as many as 50 different systems, and none of them talks to each other."

The primary hotel applications center includes property management, customer reservations and call center systems, he says. "When these systems are not connected, it's interface hell."

And progress takes time. "It took 30 years to create the problem; correcting it won't happen overnight," Rice says.

HTNG has organized working committees to address interoperability issues in cooperation with Washington-based OpenTravel Alliance Inc., a similar industry group for the travel business.

No one knows exactly how much U.S. hotels spend on IT, but Rice cites estimates of $25 billion worldwide for all computer, hardware, telephony, television and support costs. Global spending in the industry will probably increase about 5% this year, the same as hotel growth, he says.

Fortunately, hoteliers who are savvy in technology and business see the big picture. They understand that operating older, nonintegrated systems is inefficient and costly.

Major brands such as Marriott, Hilton Hotels Corp. and Fairmont Hotels & Resorts Inc. are launching and implementing initiatives to integrate their applications into a seamless whole, and some are purchasing or building their own Web-enabled applications.

Franchised brands hope to break even as franchisees pay for contracted IT services. Hotels that own all of their properties see the enhancements as necessary to keep up with the competition and streamline costs.

Consolidating for Clout

Toronto-based Fairmont Hotels is halfway through a three-year plan to overhaul its systems. Prior to this brandwide implementation, each Fairmont hotel purchased its own hardware and software, with no common standards or influence from the corporate IT department, says Vineet Gupta, Fairmont Hotels' vice president of IT. Now, the chain's consolidated approach means that it will have more buying clout.

Even so, Gupta says that with an annual technology budget of less than $50 million, Fairmont plans to write its own applications in Java. The new Web-based, integrated applications will save on maintenance and travel costs, since new updates will be available for downloading online.

Elsewhere, Hilton's OnQ has become famous in hotel IT circles. The Web-based, $90 million custom hardware and software platform was introduced in 2000 by Beverly Hills, Calif.-based Hilton and supports 2,250 U.S. Hilton properties.

OnQ includes 10 tightly woven applications that support seven major business components, including distribution services, the call center, customer reservation management, the Honors loyalty program, property management, and sales and marketing.

Like other large hoteliers, Hilton puts IT near the top of the organizational chart. Tim Harvey, the company's CIO, reports directly to CFO Steve Bollenbach. "Technology is important enough to be recognized at that level," Harvey says.

At Washington-based Marriott, a three-to-five-year plan calls for revamping the hotel's networking technology. Barry Shuler, vice president of IT strategy, and Lou Paladeau, business technology vice president, are executing the plan with a global IT staff of 1,200 full- and part-time workers.

Marriott's plan began with a video Shuler and Paladeau put together to show general managers, franchisees, owners and construction teams the benefits of moving to a converged network.

"We have a lot of separate cables, back-office local-area networks, lots of security networks," Shuler says. "We want a single network that will take care of everything using the IP protocol."

Marriott intends to roll out fiber-optic cable that supports cell phone signaling, back- and front-office networking and Wi-Fi radio. Marriott also plans to develop its own set of Web-based applications to run its hotels.

In the milieu of in-room amenities, technology is a given, notes Rice. "If you don't have Internet access, you're in trouble," he says.

Still, dropping support for older technologies requires care. For example, while Wi-Fi is a must, hotels shouldn't get rid of their in-room cabling investments just yet, says Mark Hedley, CIO at Wyndham International Inc. in Dallas. Having both can come in handy. "Certain government agencies and pharmaceutical companies do not want information going across Wi-Fi for security reasons," he explains. "Their employees have to use wired connections."

Other technologies provide in-room entertainment. This summer, Rancho Bernardo Inn in San Diego will feature Bose Wave high-fidelity radios from Framingham, Mass.-based Bose Corp., with MP3 support and Zvox all-in-one audio amplifiers from Swampscott, Mass.-based Zvox Audio LLC. "People can bring in their iPods and use the Zvox," explains Jason Durbin, business project coordinator. "The sound is just incredible. Having technology is a great sales tool for us."

More Bells and Whistles

In New York, a recent $400,000 investment, including fiber-optic network and broadcast equipment, enables Mandarin Oriental to broadcast events worldwide via satellite.

"We will be able to help a TV station

INSIDE
The Room

AT THE BALTIMORE Marriott Waterfront Hotel, exactly 27 rooms are the crème de la crème of high-tech guest pads for the $10 billion corporation. Starting next month, patrons who stay there will be able to plug their laptops, iPods, video game systems, camcorders or other devices into a single four-plug connectivity panel.

It's not just an outlet, mind you. It's the JackPack, a panel with enough smarts to know which device is plugged where and route information to the room's state-of-the-art, 32-in. flat-panel, high-definition television from LG Electronics Inc.

When a guest connects a device to the JackPack, it registers the device and then displays a window on the television to allow the guest to control the viewing, listening or playing experience.

Marriott co-developed the JackPack and television with LG Electronics and will have exclusive use of the technology for the next two years. The hotel expects to roll out 50,000 sets over the next four years at its full-service properties, says Barry Shuler, senior vice president of IT strategy.

According to Shuler, determining the needs of future guests is essential for today's IT strategy. Guest rooms are being transformed into places where business travelers can do "relaxing work," says Lou Paladeau, vice president of business technology at Marriott.

Toward that end, rooms in several Marriott hotels feature special task lighting, business desks with tabletops that pivot, ergonomic work chairs, and wired and wireless Web access.

In the future, a guest may not even have to bring his laptop; he may use his memory stick as a virtual drive and load it into an interface on the television to do work, Paladeau says.

High-end hotels are experimenting with media-oriented amenities.

At the Hilton Garden Inn in El Segundo, Calif., five guest rooms are testbeds for new technologies. One features a thumbprint entry panel in lieu of a card-key reader, and a switch pad near the bed that allows the guest to centrally control lighting, temperature, the television and window shades.

"Technology is great when you offer something that gives people a pleasant surprise," says Hilton CIO Tim Harvey. "My IT people say what gives them the jollies most is seeing their customers smile."

– Kathy Chin Leong

or company set up an event and send it on a live satellite feed within an hour," Cruz says. "We already have the cabling." Today, event promoters typically require days to get city permits for temporary cabling and set it up.

"No one else has anything like this," says Cruz. "Direct-fiber broadcasting is a brand-new capability. TV crews can plug their cameras right into the infrastructure and air a conference from anywhere in the hotel — even one of the hotel rooms."

Although the Mandarin hotel is a showcase for bells and whistles, IT managers agree that the point of technology services is to enhance guests' stay, not overwhelm them.

"We don't want you to think that technology is in your face," says Shuler, "but we want you to have it there when you want it." **54548**

Leong is a freelance writer in Sunnyvale, Calif. Contact her at kchinleong@sbcglobal.net

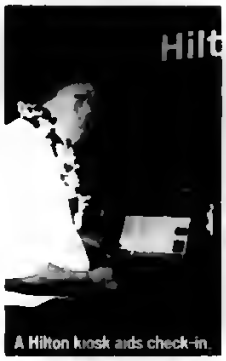
OUTSIDE The Room

SOME LARGE HOTELS are also experimenting with guest-focused technology outside the rooms. At Honolulu Airport, four touch-screen kiosks in the baggage areas are part of a Hilton pilot project. The kiosk system, developed by IBM, enables travelers to use their credit cards to check into the Hilton Hawaiian Village Beach Resort & Spa, select rooms and obtain room keys on the spot.

Marriott has piloted wireless check-in kiosks that can be placed anywhere as optional check-in points. It's also evaluating wireless technologies that will enable guests to check in remotely from their handhelds or cell phones.

Wyndham International has used IT to fine-tune its guest loyalty program. When guests fill out Wyndham ByRequest forms online, the data is automatically recalled the next time they book a room at a Wyndham hotel.

The ByRequest questionnaire also asks the guest to state his preferences regarding options such as room location, bed size, music, wine, juices, reading materials and pillows.



A Hilton kiosk aids check-in.

The IT department has integrated the ByRequest data across Wyndham's reservations, property management, sales and distribution systems, so all areas have a complete customer record. When the guest is scheduled to check in, the system alerts hotel clerks that he prefers feather pillows and likes chardonnay in his room when he arrives.

"We created this program based on highly personalized service," says Mark Hedley, Wyndham's CIO. "We worked tightly with the sales, technology and marketing people to make this successful."

So far, more than 2 million guests have joined the program.

– Kathy Chin Leong

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Rice, president of Hotel Technology Next Generation in Inverness, Ill. Nine hotel IT executives formed HTNG in 2003 to encourage their peers and vendors to work together to successfully provide hotel technology. Key players include Marriott International Inc., Global Hyatt Corp. and Mandarin Oriental.

"The problem in our industry is that there are so many fragmented buyers and suppliers," Rice says. "A hotel can have as many as 50 different systems, and none of them talks to each other."

The primary hotel applications center includes property management, customer reservations and call center systems, he says. "When these systems are not connected, it's interface hell."

And progress takes time. "It took 30 years to create the problem; correcting it won't happen overnight," Rice says.

HTNG has organized working committees to address interoperability issues in cooperation with Washington-based Open Travel Alliance Inc., a similar industry group for the travel business.

No one knows exactly how much U.S. hotels spend on IT, but Rice cites estimates of $25 billion worldwide for all computer, hardware, telephony, television and support costs. Global spending in the industry will probably increase about 5% this year, the same as hotel growth, he says.

Fortunately, hoteliers who are savvy in technology and business see the big picture. They understand that operating older, nonintegrated systems is inefficient and costly.

Major brands such as Marriott, Hilton Hotels Corp. and Fairmont Hotels & Resorts Inc. are launching and implementing initiatives to integrate their applications into a seamless whole, and some are purchasing or building their own Web-enabled applications.

Franchised brands hope to break even as franchisees pay for contracted IT services. Hotels that own all of their properties see the enhancements as necessary to keep up with the competition and streamline costs.

Consolidating for Clout

Toronto-based Fairmont Hotels is halfway through a three-year plan to overhaul its systems. Prior to this brandwide implementation, each Fairmont hotel purchased its own hardware and software, with no common standards or influence from the corporate IT department, says Vineet Gupta, Fairmont Hotels' vice president of IT. Now, the chain's consolidated approach means that it will have more buying clout.

Even so, Gupta says that with an annual technology budget of less than $50 million, Fairmont plans to write its own applications in Java. The new Web-based, integrated applications will save oo maintenance and travel costs, since new updates will he available for downloading online.

Elsewhere, Hilton's OnQ has become famous in hotel IT circles. The Web-based, $90 million custom hardware and software platform was introduced in 2000 by Beverly Hills, Calif.-based Hiltoo and supports 2,250 U.S. Hiltoo properties.

OnQ includes 10 tightly woven applications that support seven major business components, including distribution services, the call center, customer reservatioo management, the Honors loyalty program, property management, and sales and marketing.

Like other large hoteliers, Hiltoo puts IT near the top of the organizational chart. Tim Harvey, the company's CIO, reports directly to CEO Steve Bollenbach. "Technology is important enough to be recognized at that level," Harvey says.

At Washington-based Marriott, a three-to-five-year plan calls for revamping the hotel's networking technology. Barry Shuler, vice president of IT strategy, and Lou Paladeau, business technology vice president, are executing the plan with a global IT staff of 1,200 full- and part-time workers.

Marriott's plan began with a video Shuler and Paladeau put together to show general managers, franchisees, owners and construction teams the benefits of moving to a converged network.

"We have a lot of separate cables, back-office local-area networks, lots of security networks," Shuler says. "We want a single network that will take care of everything using the IP protocol."

Marriott intends to roll out fiber-optic cable that supports cell phone signaling, back- and front-office networking and Wi-Fi radio. Marriott also plans to develop its own set of Web-based applications to run its hotels.

In the milieu of in-room amenities, technology is a given, notes Rice. "If you don't have Internet access, you're in trouble," be says.

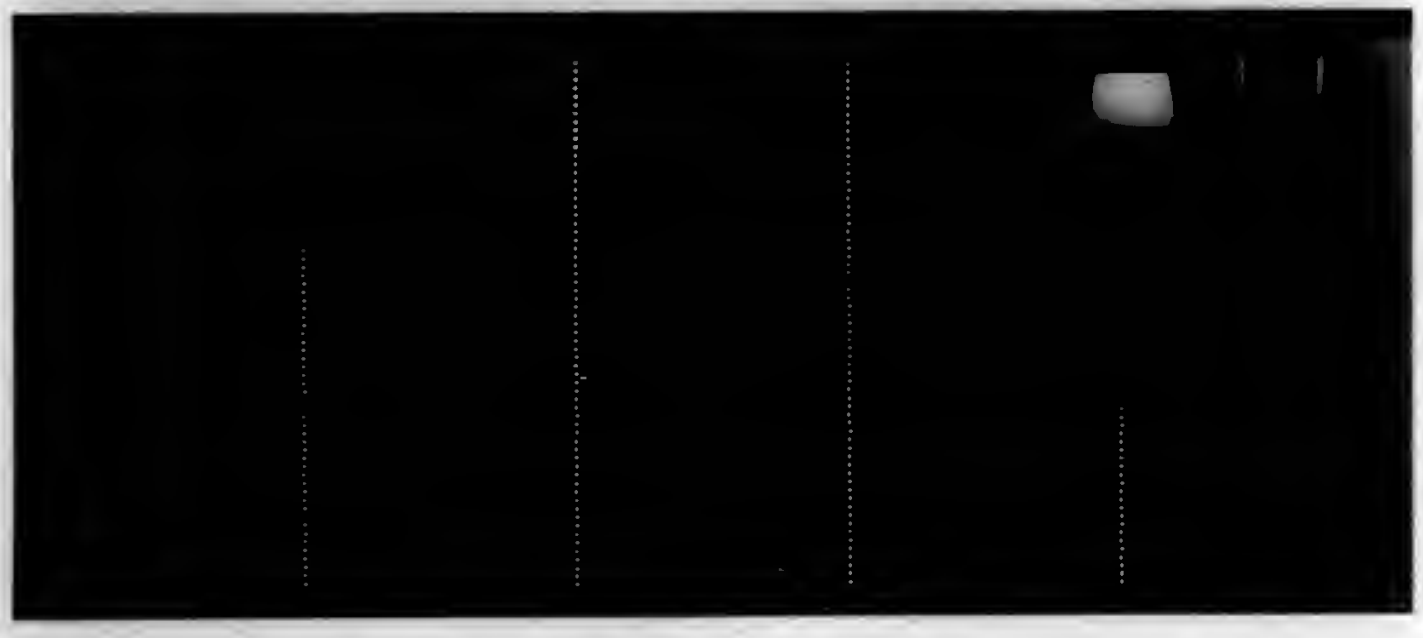
Still, dropping support for older technologies requires care. For example, while Wi-Fi is a must, botels shouldn't get rid of their in-room cabling investments just yet, says Mark Hedley, CIO at Wyndham International Inc. in Dallas. Having both can come in handy. "Certain government agencies and pharmaceutical companies do oot want information going across Wi-Fi for security reasons," he explains. "Their employees have to use wired connections."

Other technologies provide in-room entertainment. This summer, Rancho Bernardo Inn in San Diego will feature Bose Wave high-fidelity radios from Framingham, Mass.-based Bose Corp., with MP3 support and Zvox all-in-one audio amplifiers from Swampscott, Mass.-based Zvox Audio LLC. "People can bring in their iPods and use the Zvox," explains Jasoo Durbin, business project coordinator. "The sound is just incredible. Having technology is a great sales tool for us."

More Bells and Whistles

In New York, a recent $400,000 investment, including fiber-optic oetwork and broadcast equipment, enables Mandarin Oriental to broadcast events worldwide via satellite.

"We will he able to help a TV station



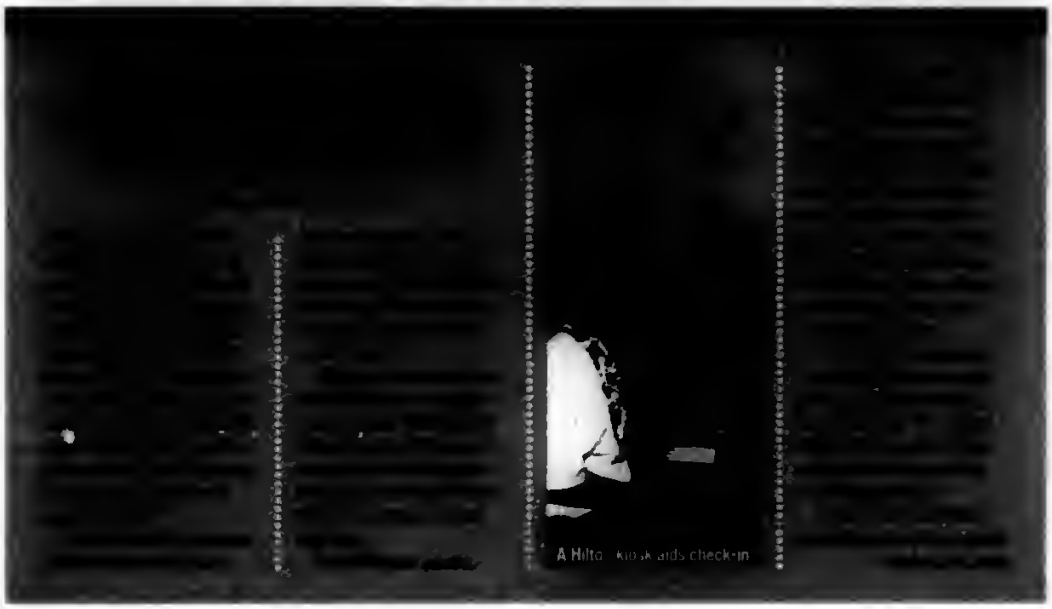
or company set up an event and send it on a live satellite feed within an hour," Cruz says. "We already have the cabling." Today, event promoters typically require days to get city permits for temporary cabling and set it up.

"No one else has anything like this," says Cruz. "Direct-fiber broadcasting is a brand-new capability. TV crews can plug their cameras right into the infrastructure and air a conference from anywhere in the hotel — even one of the botel rooms."

Although the Mandarin botel is a showcase for bells and whistles, IT managers agree that the point of technology services is to enhance guests' stay, not overwhelm them.

"We don't want you to think that technology is in your face," says Sbuler, "but we want you to have it there when you want it." 54548

Leong is a freelance writer in Sunnyvale, Calif. Contact her at kchinleong@sbcglobal.net.



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Oil AND Water

[BY MATT HAMBLEN]

NETWORK CONVERGENCE MAY BE A CHALLENGE, BUT INTEGRATING VOICE AND DATA PERSONNEL IS EVEN HARDER.

WHEN Craig Hinkley at Bank of America Corp. in Charlotte, N.C., first brought voice and data workers together for a three-year VoIP project that would affect 180,000 users, the room divided, and "the voice and data guys set up castles and started lobbing grenades," says the senior vice president of network architecture.

As more companies start down the winding road to converging voice and data communications, it's ironic that the first obstacle they hit isn't a technical hurdle but a human one. That's because converged network projects work best when companies get voice engineers under the same management umbrella as the data team, which means the CIO takes charge of the voice side of the corporation.

Sounds easy enough, even logical. You simply convene a campfire in a rustic setting and have the voice and data teams sit together singing "Kumbaya," right?

Not exactly, say some IT managers who have been through the process and lived to talk about it. The fact is, because the separation of the two teams is so ingrained in tradition, the CIO's attempt to don the chief telephony officer's hat is fraught with corporate politics.

And because voice and data people don't usually work together, they tend to have different work styles and personalities. One observer compares the differences between the two teams to those between *Animal House*-type fraternity members and dormitory residents, with the former setting up messy data-switching closets while the latter tend well-organized voice-switching closets. The data folks might be stereotyped as rebels on hot rods, while the voice workers are country-clubbers in sedans.

Despite these differences, bringing the two workforces together is essential to successful convergence projects, analysts and IT managers say. And as time goes on, more companies will be dealing with the issue as they update their aging circuit-switched phone systems and increasingly opt for an IP converged network to support applications that mix voice with traditional data applications such as e-mail.

Recognizing Differences

A good start to achieving harmony is understanding the two groups' very different perspectives. Data workers tend to focus oo data availability and reliability, not the millisecond time delays that annoy voice users, says Clay Swenson, a VoIP project manager at GlaxoSmithKline PLC in Durham, N.C., where a pilot convergence project is under way.

For their part, voice personnel understand the need to eliminate that millisecond delay, but they have to adjust to making voice "just another application" in a data network with voice over IP, according to Swenson.

At many companies, voice teams have been traditionally lumped under the facilities group in the organizational chart and charged with maintaining the copy machines as well as the phones, Swenson says. The data teams, on the other hand, work for the CIO and have been rulers of the server domain, operating in a world less in tune with immediate user needs.

For example, when a voice circuit goes down, users are instantly up in arms, but when a data system goes down, it may take a while to affect their work, so they may not immediately notice.

To neutralize these differences, the pharmaceutical giant set up virtual teams of voice and data workers that will collaborate at least until VoIP is rolled out globally throughout the organization.

At Bank of America, Hinkley says he observed that the teams have a "natural distrust" of each other, with voice workers tending to be older than those in the data group and each being accustomed to different ways of getting things done. That's why Bank of America started bringing the groups together slowly with meetings and top-level discussions of what skills were needed for the VoIP project.

Bank of America has relied on a structure that happens to be similar to what analysts at Gartner Inc. recommend. The bank separates VoIP infrastructure services teams from VoIP application services teams, and each group includes people with both data and voice skills. In addition, each of those teams needs to operate with a security team, Hinkley says.

The model at Bank of America helps define the roles of voice and data engineers, he says, "which helps both camps realize that each has responsibilities to make sure the IP environment is successful."

Hinkley also advises engaging in cross-training. "If I were a traditional voice engineer, I'd be cross-pollinating my skill set with IT practices and understanding of data network components," he says.

That doesn't mean that voice engineers need to become network design engineers, he adds, but they should understand the key components of data networking.

As for data engineers, they need to understand the importance of real-time communications and its effect on network design, since VoIP arguably provides the first test of using data networks to meet the needs of real-time communications with voice, Hinkley says.

Turf Issues

Experienced managers also advocate throwing the voice and data groups together more than they're used to, whether through meetings and other gatherings or even by moving their

Key Jobs

To ensure a successful VoIP network convergence rollout, Gartner advises organizations to merge their existing voice teams with other IT functions. Here are the key job groups Gartner says convergence teams should include, as well as some of their duties:

- **VOICE SPECIALISTS.** These workers tend to come from the telecommunications manager ranks and have experience recognizing different types of users in the company, as well as cultural and regional differences in global organizations. They must have the vision to plan for developments in voice such as IP telephony and Session Initiation Protocol.
- **NETWORK DESIGNERS AND MANAGERS.** This group recognizes that voice needs to be included in the host of applications supported by design architects. It identifies specifications defined by voice specialists and handles network reliability, latency and quality of service.
- **SECURITY SPECIALISTS.** Members of this group need to work with voice team specialists as actively as they work with data networking teams. IP telephones, which are network endpoints, must ultimately comply with network-access security policies defined by security specialists.

cubicles closer together.

That's sound advice, according to Janet Smith, a consultant at Janet Smith & Associates in Chapel Hill, N.C. Smith combined the voice and data teams at an academic medical center where she worked in a prior job, but she found that it wasn't easy to get the two groups to play nicely together. "It's a very difficult nut to crack," she says.

"The telecom workers sense that they almost always lose in these convergence situations, and the telecom team is not eager to give up its territory," Smith says. And because the CIO is often from the data tradition, he may have difficulty valuing telecommunications workers and their experience in dealing with people as opposed to technology, Smith adds. It helps if the CIO recognizes that difference and addresses it with both groups.

Even if you don't have an IP telephony project in the works, Smith advocates merging the voice and data

teams. And that doesn't mean just changing the organizational chart so that telecommunications reports to the CIO, she adds. Voice and data staffers need to work alongside one another in the same work space, with the integrated teams focused on three areas: infrastructure, applications and customer-facing functions.

But before merging the teams, companies need to have common procedures and methods in place for both groups to handle job orders (such as a phone for a new employee), as well as change and problem management, inventory tracking and asset management. Some of these processes are standardized in systems management software packages.

If convergence is really working, Smith adds, your company has a single number for users to call for help, whether the problem is with a PC, a phone or other technology, such as a workgroup copier.

Smith's advice is mirrored by other analysts, including those at Gartner, who recently urged in a report that CIOs merge their voice teams with other key IT functions. Gartner compared VoIP to CRM initiatives, which require cross-business cooperation to be effective. It said that if telephony isn't the responsibility of those planning the network infrastructure needed for real-time communications, a company will be unable to maximize the benefits of new technologies.

VoIP convergence might require companies to retrain or recruit workers with new skills in order to build a communications team with voice specialists, network designers and managers, and security specialists, the report says (see box, page 40).

"The IP telephony decision needs executive sponsorship due mainly to political issues, and the three teams must cooperate," says Lawrence Orans, one of the authors of the Gartner report. "Otherwise, the project will be doomed." **54571**

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46% of large companies in North America are planning a VoIP deployment in 2005, according to a survey of 427 companies conducted last year by Forrester Research.

of companies in the Forrester survey will have completed the convergence of their entire voice and data networks onto a single network by 2010.

of large and midsize companies will have started the convergence process by 2010, according to Gartner.

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BRAIN FOOD FOR [illegible]

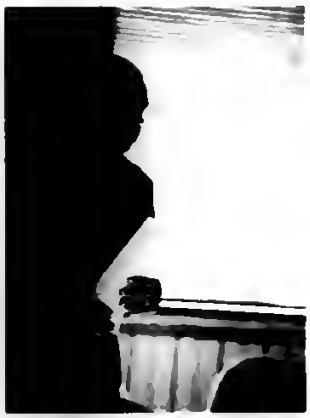
The Problem with Open-Door Policies

STEAL THIS IDEA

Sometimes, so many people are lined up at your "open door" that you, the manager, can't get any work done. Plus, an open-door policy trains your staff to come to you with all of their problems instead of solving them on their own.

Tom Foster, a Fort Lauderdale, Fla., management consultant who writes a blog called Management Skills (*www.managementblog.org*), has identified a couple of ways to deal with the problem.

"On the wall behind the swivel chair of one of my favorite clients is posted the following phrase: 'What are you going to do about that?' " Foster says. "The next time one of your team members enters your open door with a problem they wish you would solve for them, try this response: 'That's curious – what are you going to do about that?' "



It may sound harsh, but managers should be building a team that can come up with solutions, he says.

"One of my clients printed up a small pad of paper that he kept on the corner of his desk. Whenever a team member arrived with a problem, he ripped off the top sheet and sent them to the conference room for 10 minutes," Foster says. Here's what the sheet said:

What do you think is causing the problem?

Name three solutions that might solve the problem.

Which is the best solution that might solve the root cause of the problem?

The result is that staffers come to you with solutions instead of problems.

– Mitch Betts

Best Bits

The most useful parts of recent business and IT management books

Many Unhappy Returns: One Man's Quest to Turn Around the Most Unpopular Organization in America, by Charles O. Rossotti (Harvard Business School Press, 2005)

You think you've got problems. On Charles Rossotti's first day as commissioner of the Internal Revenue Service in 1997, he thought it would be nice to send an introductory e-mail to all IRS employees. The staff just smiled. There was no IRS e-mail system. "I could send an e-mail to others in my Washington office, but all of the other offices had their own e-mail systems, or had none at all," he recalls.

Rossotti, the first businessman and technologist to lead the IRS, describes his efforts to reform an agency that manages a $2 trillion tax system with 100,000 demoralized employees, antiquated technology (a core system dates back to 1962) and zero respect. It didn't help that the IRS previously had wasted $4 billion on a botched IT overhaul.

It seemed like an impossible turnaround job, but Rossotti left the IRS a better place in 2002 and, in this book, offers hard-won lessons for managing successful change.

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Things to Ponder

The No. 1 problem with database marketing isn't technology-related: it's the lack of sufficient staff to analyze all the data, according to a Forrester Research Inc. survey of 124 U.S. retail marketers.

Twenty-six percent of online households are getting e-statements from their financial providers, says another Forrester report. "The only problem is that 97% of e-statement adopters continue to receive a paper statement," the report says, because consumers want the paper for their records and don't see a compelling reason to give it up. "Firms must wean customers from their addiction to paper by offering a printable statement in PDF format, automatically turning off paper statements for e-statement adopters and charging customers who request a paper statement via snail mail," the report concludes. **54577**

SOURCE: MERRILL LYNCH & CO., NEW YORK, APRIL 2005

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The IT Economy

One way to reduce complexity in your IT shop is to cut down on the number of IT vendors you do business with. And according to a recent survey, 50% of IT managers are doing just that.

10%	Plan to dramatically reduce the number of vendors
40%	Plan to slightly reduce the number of vendors
43%	Are comfortable with the number of vendors
7%	Plan to expand the number of vendors

BASE: 100 IT managers at Fortune 1,000 companies

SOURCE: GOLDMAN SACHS GROUP INC., NEW YORK, MAY 2005

Buying Intentions

IDC researchers say their index of business IT demand (below) shows that user spending expectations have slipped again. "For many of the last six months, user expectations were overly optimistic," says John Gantz, IDC's chief research officer. "But slowly the outside world seems to have sunk in. Corporate profits are good, but not that good. Consequently, the IT spending climate is good, but not that good."

Index of Business IT Demand 2004-2005

The buyer intent index is based on monthly surveys of 400 to 500 U.S. CIOs and business executives, who are asked about their IT spending expectations for the next 12 months. Results are weighted to be representative of the U.S. market. An index of 1,000 means zero growth. Caveat: Buying intentions don't always lead to real spending.

SOURCE: IDC'S FUTURESCAN, PRAMERSHAM, MASS., MAY 2005

ThinkTank

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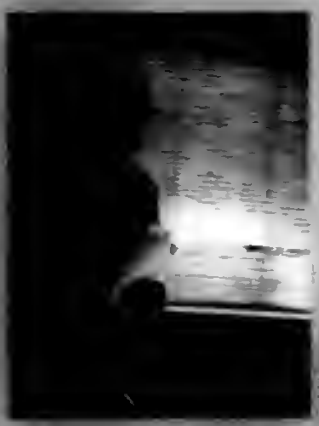

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PICTUREQUEST

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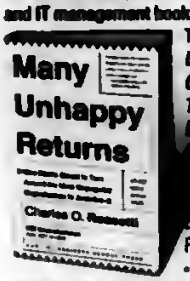

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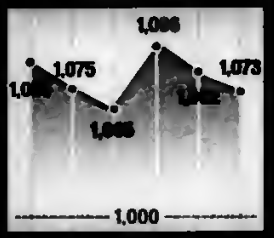

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PARIS
European IT Forum
■ Le Meridien Montparnasse Hotel, Sept. 26-27
Sponsor: IDC
The Business-Orieoted IT Agenda: IT Innovation and Business Transformatioo conference will focus on how CEOs, CIOs and top business executives can use IT innovatively to transform business processes and business models by learning from and interacting with the leading influencers and practitioners in this area. Presenters will include Nicholas Negroponte from MIT's Media Lab; Jeremy Rifkin from the Foundation on Economic Trends; Lester Thurow, professor of management and economics at MIT's Sloan School of Management; and Peter Weill from the Center for Information Systems Research at the Sloan School of Management. *www.idc.com*

SINGAPORE
Leadership Development
■ The Ritz-Carlton Millenia Hotel, June 28-29
Sponsor: The Conference Board
The 2005 Asia-Pacific Leadership Development Conference: Defining Capability, Developing Competence and Delivering Performance will include topics such as setting the standard for global leadership, a global report on the leadership pipeline, strategic partners in the change process, developing and aligning leadership competencies and skills, cost-effective development, developing global leadership talent in Asia, strengthening leadership capacity, and new directions and future developments. *www.conferenceboard.org*

SÃO PAULO, BRAZIL
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■ Hotel Gran Meliá WTC, June 28-29
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The Second Annual Gartner Outsourcing Summit will include topics such as new fundamentals of successful sourcing, optimizing management in a multisourced environment, assessing options in IT infrastructure outsourcing, measuring the total cost of sourcing, understanding business-process outsourcing risks and choices, performance measures and trends, best practices for minimizing and mitigating risk in outsourcing, evaluating service providers, future scenarios for outsourcing, and next-generation contracts. *www.gartner.com*

MUNICH
Catalyst Europe
■ Hilton Munich Park, Nov. 2-4
Sponsor: Burton Group
Conference topics will include service-oriented architecture and the Web services framework; digital identity and the tools necessary to manage it; deployment and scaling issues; and progress toward widely accepted identity, privacy, federation and trust standards. The forum will also cover how to build and deploy a scalable, intelligent infrastructure; advanced networking techniques; and security. *www.burtongroup.com* **54552**

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Career Watch

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Will there soon be no place left for the hard-core techie with antisocial tendencies – the stereotypical coder with a heart of ones and zeros? Opportunities will remain for purely technical professionals, but the workplace is increasingly team-oriented. If you can't work well with others, your options can be limited. Keep in mind, too, that because companies require IT staff to take a more strategic and collaborative approach than in the past, soft skills are playing a larger role in an IT candidate's marketability and are frequently a deciding factor when evaluating two individuals with otherwise equal qualifications.

Are schools recognizing the need for strategic thinking and interpersonal skills in today's IT pros? How are they meeting this need? Of course, broad-based general education has always been part of a four-year curriculum at most universities. But increasingly, administrators of computer science- and information systems-related programs are recognizing and addressing the need for nontechnical skills development. They're beginning to expand their programs to include a more well-rounded curriculum, including instruction in areas such as business, finance and marketing.

What is surprising, however, is that many companies are not offering this kind of training to their own IT staff. In a recent survey commissioned by our company, nearly half – 47% – of 1,400 CIOs polled said their companies do not provide IT professionals with instruction in business and communication fundamentals. Many firms faced with an immediate need for technology expertise and limited budgets for professional development opt to support technical training instead. While these managers may perceive soft skills as less critical, they're missing out on an opportunity to enhance the team's productivity as well as their ability to collaborate on solving everyday challenges. **54344**

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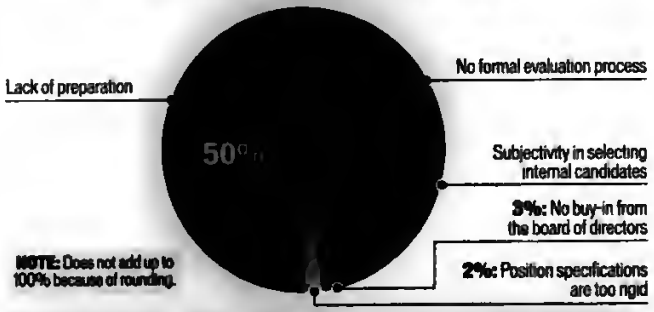

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PAUL GLEN

Lenses on Leadership

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But as our responsibilities expand and we change jobs and take on supervisory, managerial and leadership roles, it becomes easy to keep using the same old perspectives that have served us so well in the past. Unless we examine the lessons we learned as junior programmers, we continue to apply them to the responsibilities now confronting us as CIOs. That doesn't always work so well.

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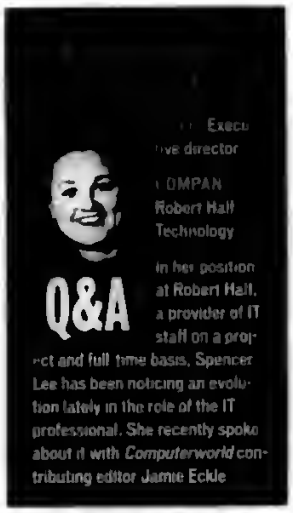

Q&A

Execu ive director OMPAN Robert Half Technology

In her position at Robert Half, a provider of IT staff on a proj ct and full time basis, Spencer Lee has been noticing an evolution lately in the role of the IT professional. She recently spoke about it with *Computerworld* contributing editor Jamie Eckle

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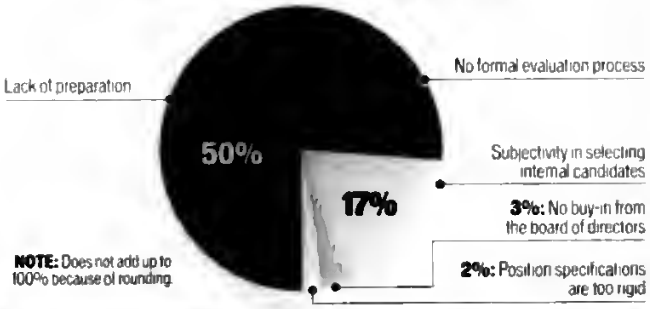

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Nationwide IT firm is looking for multiple Analysts/Software Engineers/System Administrators Should have bachelor's degree in computer science/related field with 2 years experience in any one of the following set of tools in designing developing, implementing and testing IT applications (except DBA's)

1 UNIX, Solaris and Windows System Administration

2 Java, J2EE, JSP EJB XML, SOAP Web Services using IBM Web Sphere/Web Logic

3 SAP XI Siebel, Seebeyond Tibco and Webmethods

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Red Hat

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"It would be a hard sell," said Sam Loyd, a senior database and systems administrator at McKee Foods Corp. The Collegedale, Tenn.-based maker of Little Debbie snacks and other products is testing Oracle Corp.'s database software on Linux servers. But Loyd said the company is unlikely to try Red Hat's directory software.

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Red Hat CEO Matthew Szulik said his company is focusing on infrastructure software, an area where the vendor feels it provides additional value to its operating system users.

Ongoing development efforts include virtualization and certificate management tools, he noted. However, Red Hat won't enter the "application" market with products such as databases or collaboration servers, Szulik said.

Gary Hein, an analyst at Burton Group in Midvale, Utah, said Red Hat obviously has a strong position in the operating system business. But, he added, it will be hard for the company to move "up the stack" and compete in software markets where vendors such as IBM and Oracle are much stronger.

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Meanwhile, James Mularadelis, a senior Unix engineer at Bristol-Myers Squibb Co. in New York, said he harbors concerns that Red Hat's directory efforts "could waste a lot of resources" that might be better spent on its core operating system. "You don't want them to choke by biting off directory," he said. **54823**

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Servers

Insurance Co., which has had an eight-way version in its data center for the past two weeks.

One of the reasons St. Paul is turning to a denser and more space-efficient system is the amount of data center room taken up by the smaller servers it now uses, said Matthew Barlow, the insurer's infrastructure development manager. "We're trying to reduce our total real estate," said Barlow, who also believes that more scaled-up servers like IBM's will be less expensive to manage and provide increased virtualization capabilities.

SOURCE: INTERNATIONAL DATA GROUP, INC. (IDC.COM)

Insufficient space in data centers topped the list of long-term concerns cited by IT managers who responded to a recent survey conducted jointly by Concord, Mass.-based InterUnity Group Inc. and AFCOM, an Orange, Calif.-based association of data center professionals. Nearly 40% of the 161 respondents said they expect space constraints to become one of their biggest issues in the next two years (see chart).

The greatest immediate concern cited in the survey, which was released in April, was power and cooling requirements. That's no surprise to Stevan Lewis, director of enterprise planning at BMO Financial Group, a financial services organization that includes Bank of Montreal and its subsidiaries.

"The space issue is a relatively cheap one to sort out," he said. "Building a raw shell isn't where the real cost impact is. Power and cooling is a far more prevalent issue."

Building a data center shell costs about $220 (U.S.) per square foot, Lewis calculated. A fully loaded rack of blade servers may take up only about 30 square feet of space but can consume 12 kilowatts of power at a cost of $250,000 annually, he noted. "The physical footprint for the core building is costing you a very small fraction of what it is going to cost you longer term," he said.

A four-CPU building block for IBM's xSeries 460 server

But Jim Yukech, vice president and data center executive for the IT division at Cincinnati-based Catholic Healthcare Partners (CHP), said he believes he must continue to move to denser server technology because of the physical limitations of his Youngstown, Ohio, data center.

CHP, which operates more than 100 health care facilities and programs in various states, recently consolidated 10 data centers into two buildings. The Youngstown facility that Yukech manages takes up 20,000 square feet, with 7,000 square feet of raised floor space. Expanding the data center in the crowded urban area where it is located would be very difficult, he said.

Yukech hopes to avoid the need for expansion by refreshing his hardware every five years and bringing in physically smaller systems, such as racks of blades.

For instance, CHP is in the process of removing an old VAX system that dates to 1989, which will free up space for nine blade-server racks. The company is also installing newer ceiling-based cooling technologies. CHP should be able to head off "a real estate crunch" as long as it adheres to the five-year server replacement cycle, Yukech said.

There are other reasons why users may want to move to denser and more scaled-up systems, including the opportunity to get improved virtualization and systems management features, said Jean Bozman, an analyst at market research firm IDC.

But many IT managers will have trouble putting in denser servers, said Bruce Edwards, president of CCG Facilities Integration Inc., a data center consultancy in Baltimore. "I see them struggling with what they want to buy [versus] what they can accommodate in their physical data center from a power and cooling perspective," he said. **54827**

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One of the reasons St. Paul is turning to a denser and more space-efficient system is the amount of data center room taken up by the smaller servers it now uses, said Matthew Barlow, the insurer's infrastructure development manager. "We're trying to reduce our total real estate," said Barlow, who also believes that more scaled-up servers like IBM's will be less expensive to manage and provide increased virtualization capabilities.

Insufficient space in data centers topped the list of long-term concerns cited by IT managers who responded to a recent survey conducted jointly by Concord, Mass.-based InterUnity Group Inc. and AFCOM, an Orange, Calif.-based association of data center professionals. Nearly 40% of the 161 respondents said they expect space constraints to become one of their biggest issues in the next two years (see chart).

The greatest immediate concern cited in the survey, which was released in April, was power and cooling requirements. That's no surprise to Stevan Lewis, director of enterprise planning at BMO Financial Group, a financial services organization that includes Bank of Montreal and its subsidiaries.

"The space issue is a relatively cheap one to sort out," he said. "Building a raw shell isn't where the real cost impact is. Power and cooling is a far more prevalent issue."

Data Center Dilemmas

Which of the following will be your organization's biggest data center issues two years from now?

39.8%	Insufficient data center or computer room space
35.4%	Data center consolidations
22.4%	Building new data centers
18.6%	Insufficient computing capacity to meet business requirements
16.8%	Data center relocations
10.6%	Excess data center or computer room capacity
3.7%	Excess computing capacity

Base: 161 respondents who were surveyed earlier this year; multiple responses allowed.

Source: InterUnity Group Inc. and AFCOM

Building a data center shell costs about $220 (U.S.) per square foot, Lewis calculated. A fully loaded rack of blade servers may take up only about 30 square feet of space but can consume 12 kilowatts of power at a cost of $250,000 annually, he noted. "The physical footprint for the core building is costing you a very small fraction of what it is going to cost you longer term," he said.

A four-CPU building block for IBM's xSeries 460 server

But Jim Yukech, vice president and data center executive for the IT division at Cincinnati-based Catholic Healthcare Partners (CHP), said he believes he must continue to move to denser server technology because of the physical limitations of his Youngstown, Ohio, data center.

CHP, which operates more than 100 health care facilities and programs in various states, recently consolidated 10 data centers into two buildings. The Youngstown facility that Yukech manages takes up 20,000 square feet, with 7,000 square feet of raised floor space. Expanding the data center in the crowded urban area where it is located would be very difficult, he said.

Yukech hopes to avoid the need for expansion by refreshing his hardware every five years and bringing in physically smaller systems, such as racks of blades.

For instance, CHP is in the process of removing an old VAX system that dates to 1989, which will free up space for nine blade-server racks. The company is also installing newer ceiling-based cooling technologies. CHP should be able to head off "a real estate crunch" as long as it adheres to the five-year server replacement cycle, Yukech said.

There are other reasons why users may want to move to denser and more scaled-up systems, including the opportunity to get improved virtualization and systems management features, said Jean Bozman, an analyst at market research firm IDC.

But many IT managers will have trouble putting in denser servers, said Bruce Edwards, president of CCG Facilities Integration Inc., a data center consultancy in Baltimore. "I see them struggling with what they want to buy [versus] what they can accommodate in their physical data center from a power and cooling perspective," he said. **54827**

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Summer of Code

WHAT'S THE MATTER WITH KIDS TODAY? Lack of experience. At least that's what's wrong with fresh-out-of-school job applicants from the point of view of corporate IT. These kids may have perfectly respectable computer science educations. But they've got no experience. Their IT knowledge is virtually all from theory, just about none from practice. The IT systems they've developed have typically been trivial, academic jobs. In the real world of corporate IT, they have a lot to learn.

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What does Google get for its million-dollar investment? A pile of goodwill with the open-source crowd, and probably an inside track for hiring any of those 200 winning applicants. If you think of it as a big internship program that pays eacb intern a measly $1,500 a mooth, you've got the right business model in mind.

Where it gets interesting is in what the studeots will have to do. They'll have to propose projects that have real, practical value to open-source groups such as The Perl Foundation, the Mono Project or Ubuntu Linux. They'll have to negotiate details and nail down plans.

Then they'll have to run the projects, which means making their code public on a site like SourceForge.net, dealing with all the input and complications of the open-source process and doing it all on the usual open-source budget: a threadbare shoestring.

And if a program participant gives up and doesn't complete the project. no $4,000 — and no T-shirt.

See the benefit? Nobody coming out of this "Summer of Code" deal will emerge believing an IT project is about algorithms, intelligence and elegance. Yeah, you need those things in real-world IT. But you also need business-value judgment, political savvy and skin thick enough to handle code reviews by other programmers, not just professors and graduate assistants.

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FRANK HAYES, Computerworld's senior news columnist, has covered IT for more than 20 years. Contact him at frank_hayes@computerworld.com.

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54780

Looks Like a Long, Hot Summer

User says that when he takes his laptop out of its case, it's very hot to the touch. The machine checks out OK, and support pilot fish wonders aloud if maybe user just forgot to shut it down before packing it up. "I never shut down the laptop," user tells fish. "I just let it go into sleep mode, to save the time for bootup and shutdown." That's not wise, fish points out. "One of the techs in my department told me the same thing several times," user says. "But leaving it on never caused a problem before, so I just ignored the advice."

SHARK TANK

Wake Up!

Company Web site stops responding, and when pilot fish pings the servers, they don't respond either, so he heads for the server room. "It was 94 degrees inside," fish says. "Servers were shutting down, humidity was through the roof, stuff was shorting out – utter chaos. Climate control had failed spectacularly, which puzzled us, as the system was supposed to phone an alert to the network admin if the temp got over 75 degrees." When fish hands down notebook, he tells fish the alert system *does* work. "It's been going off several times a night for months now, waking him up in the middle of the night," groans fish. "To solve the issue, he shut off the alert system."

First Things First

Did you get my e-mail? boy user asks pilot fish as he stops by user's desk. No, I just got in late after running a business errand, fish says. What's the problem? "The user then spent the next few minutes complaining that he had sent me an e-mail and I had not read it yet," says fish. "He finally explained his problem, and within a few minutes, I had taken care of the issue. When I returned to my desk, I opened up my e-mail and found the message from the user. It read, in its entirety: 'Please see me.' "

The Reason Why

Help desk pilot fish gets call from a user: "Ever since I saw your face in the building, my printer has been acting funny. Whatever the look was working on must have emitted something that is affecting my printer. Can someone come look at it?"

Another Bad Idea

PC goes bad, so support pilot fish shifts user for a few days in the cubicle of someone who's on vacation. Next morning, fish gets a frantic call: User says his mouse has exploded! "It hadn't so much exploded as it had kind of melted," fish reports when he sees it. "It spent the night on the desk owner's USB-powered coffee-warming hot plate – which the user had mistaken for a mouse pad."

HEAT THINGS UP FOR SHARKY. Send me your true tale of IT life at sharky@computerworld.com. You'll snag a snappy Shark shirt if I use it. And check out the daily feed, browse the Sharkives and sign up for Shark Tank home delivery at computerworld.com/sharky.

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